# CONNIER LA CONSOLIDATED WITH THE FERTILIZER GREEN BOOK

#### ANNOUNCING

## Nitrogen Division ALLIED CHEMICAL & DYE CORPORATION

NITROGEN DIVISION, Allied Chemical & Dye Corporation, was formed June 1, 1952, by combining the Sales Agency Department of The Barrett Division and the Nitrogen and Organic Chemicals Sections of The Solvay Process Division, Allied Chemical & Dye Corporation.

The Sales Agency Department of The Barrett Division formerly sold the nitrogen products manufactured by The Solvay Process Division. The formation of the Nitrogen

Division consolidates production and sales into one organization, thus streamlining these two operations for greater efficiency.

Nitrogen Division now operates and markets the output of the Nitrogen plants at Hopewell, Virginia, and South Point, Ohio. Some of the products now handled by the Nitrogen Division are listed below.

Other new plants and new products will be announced at an early date.

Anhydrous Ammonia • Nitrogen Solutions • URANA† Solution

ARCADIAN\*, the American Nitrate of Soda • A-N-L\* Nitrogen Fertilizer

Sulphate of Ammonia • NYTRON\* (Synthetic Organic Detergent)

Production and sales will be handled by essentially the same personnel that has functioned heretofore...your assurance of high standards of product quality and reliable, dependable service.

Nitrogen Division
ALLIED CHEMICAL & DVE CORPORATION

40 Rector Street, New York 6, N. Y.
Richmond 19, Va. • South Point, Ohio • Hopewell, Va.
Columbia 1, S. C. • Atlanta 3, Ga. • San Francisco 3, Cal

## AA Quality ...

for over 85 years
a symbol of quality
and reliability

Mining phosphate rock at A.A.C. Mines, Pierce, Florida.

#### principal AA Quality products

All grades of Florida Pebble Phosphate Rock
AA QUALITY Ground Phosphate Rock
All grades of Commercial Fertilizers
Superphosphate Sulphuric Acid
Insecticides and Fungicides
Phosphoric Acid and Phosphates
Phosphorus and Compounds of Phosphorus
Fluosilicates Salt Cake
Gelatin Bone Products

**Ammonium Carbonate** 

#### The AMERICAN AGRICULTURAL CHEMICAL Co.

GENERAL OFFICE: 50 CHURCH STREET, NEW YORK 7, N.Y.

30 FACTORIES AND SALES OFFICES, SERVING U. S., CANADA AND CUBA-ASSURE DEPENDABLE SERVICE

## GROWING SEASON

FOR FERTILIZER "PLANTS"

Never was the farmer more conscious of quality in the fertilizers he buys than today. Because they cut casts of production and increase yields, quality fertilizers are in demand now as never before. Fertilizer manufacturers who put real quality into their goods find that their fertilizer plants grow just as surely as the crops in the farmers fields.

There is no higher quality source of

nitrogen than SMIROW TANKAGE. SMIROW TANKAGE is 100% natural organic. It is 90% water insoluble and 90% available. It is always in perfect mechanical condition and uniform both in texture and color.

both in texture and color.

Correct proportions of SMIROW TANKAGE in your fertilizers assure the quality that makes a year-round "growing season" for fertilizer manufacturers who use it.

To help make your sales grow, write for samples and prices.



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WALTER W. BROWN PUBLISHING CO., INC.

75 Third St. N. W., Atlanta, Georgia

Phone Atwood 4160

ERNEST H. ABERNETHY, President

BRUCE MORAN, Editor V. T. CRENSHAW, Business Manager

Subscription rates: United States, \$3.00 per year. Foreign \$5.00 per year.

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COMMERCIAL FERTILIZER, entered as second class matter, October 12, 1910, at the post office at Atlanta, under the Act of March 3, 1879. Published monthly except semi-monthly in September, by Walter W. Brown Publishing Co., Inc., 75 Third St., N. W., Atlanta Georgia.

#### High-analysis fertilizer + Ammonium Sulphate pay off in high seed corn quality and increased yield for Seem Seed Co., Zionsville, Pa.

● Joseph T. and Benjamin L. Seem, operating the Seem Seed Co. at Zionsville, Pa., are thoroughly sold on the performance of Ammonium Sulphate, both in high-nitrogen complete fertilizers and as a supplementary nitrogen material for direct application.

In their hybrid seed corn operations, the Seem Brothers plow down 700 to 800 lbs. of a 10-10-10 or its equivalent to improve the nutrient level of the soil. At planting time, they add an application of 100-150 pounds of 10-10-10 in the rows. When the crop is well along, the Seem Brothers now also side dress with 300-500 pounds of Ammonium Sulphate as a direct application.

This scientific fertilization program with Ammonium Sulphate has increased the average seed corn yield from a previous 60 bushels per acre to 100 bushels. In addition, test weights are higher and seed quality is excellent.

The Seem Brothers report equally good results from the use of Ammonium Sulphate on seed wheat and barley. From an investment standpoint, the return from the increased yield is many times over the fertilizer cost.



BENJAMIN L. SEEM

JOSEPH T. SEEM

## Bigger yields for farmers mean better business for you

◆ As more and more farmers turn to U·S·S Ammonium Sulphate—in high-nitrogen fertilizers and for direct application—to increase both the quantity and quality of their crops, demand goes up and up.

Be ready to meet this demand by using U·S·S Ammonium Sulphate to supply a major part of the nitrogen content in your high-

nitrogen complete fertilizers. And supplement your line by selling U·S·S Ammonium Sulphate in 100-pound bags for direct application.

For complete information on U·S·S Ammonium Sulphate, contact our nearest sales office or write directly to United States Steel Company, 525 William Penn Place, Pittsburgh 30, Pa.

U·S·S AMMONIUM SULPHATE



. .

UNITED STATES STEEL

## LONG

## ON VALUE

that's FULTON QUALITY COTTON BAGS

It's the bag with the "plus" value that most consumers want. After the hard trip from your plant to the dealer, thence to the farm, your bag of fertilizer arrives in first class condition—unbroken—easy to handle and store. When the fertilizer is emptied the farm wife collects her premium—many yards of first quality sheeting or osnaburg that are easily made into clothing, towels, draperies, slip covers, etc.

Fulton Quality Cotton Bags are available from our Southern plants.



Fulton BAG & COTTON MILLS Atlanta \* New Orleans \* Dallas \* Kansas City, Kans. \* Minneapolis St. Louis \* Danver \* Los Angeles \* New York City, 347 Medison Ave



MANY years of experience in the fertilizer industry have given the Harte Company valuable "know-how" about the development and application of the fertilizer processes. Extensive study, research and on-the-job training have made the chemical and design engineers of the Harte Company specialists in the fertilizer industry. Specialists in visualization and application.

This diversified experience and knowledge of Harte engineers is available to you in planning the design and construction of a raw materials processing plant or a mixing plant. Whatever your fertilizer plant needs the Harte organization can handle your complete job or any part, from original plans to finished operating plant, efficiently and economically.

In fertilizer plant planning there's no substitute for experience. Why not call in a Harte representative for a discussion of your plans? There is no obligation.

#### Harte Engineers Are Specialists in:

- Single Superphosphate Plants
   Phosphoric Acid
   Ammonium Sulphate Plants
   Granulation Plants
- Ammonium Sulphate Plants
   Storage Buildings
   Fertilizer Mixing Plants
- Nitrophosphate Plants • Triple Superphosphate
  - Warehouses · Sulphuric Acid

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## Need Valves, Pipe and Fittings for Nitrogen Service?

There's a complete "package" of pipe, valves, fittings and all the accessories needed to insure a trouble-free system available from one source.

Aluminum pipe cut to length and threaded, aluminum fittings in the sizes and kinds that you need, plus gage glass fixtures, measuring tanks, and air-compressors—everything you need for a complete installation is **in stock** and ready for immediate shipment. Ask your solution representative. He'll be able to advise you about aluminum for this service, and likely as not, he'll tell you that, "If it's corrosives you're piping—try Tull's first."

"If you're thinking of a "Nitrogen" installation in the future," write our Sales Manager for a copy of "The Installation and Operation of a Nitrogen Solution System"—there's no charge, and it may be helpful to you. For complete technical advice, see your solution representative. He's competent to advise you and will welcome the opportunity to do so.

\*

J. M. Tull Metal & Supply Co., Inc.



## THREE ELEPHANT AGRICULTURAL PENTAHYDRATE BORAX

COMPOSITION Contains a minimum of 44%  $B_2O_3$  or approximately 121% equivalent Borax. ADVANTAGE More economical because the Borate in this form is more concentrated. PURPOSE To correct deficiency of Boron in the soil.

RECOMMENDED USES As an addition to mixed fertilizer, or for direct application to the soil.

FOR CORRECT APPLICATION Consult your local County Agent or State Experimental Station.

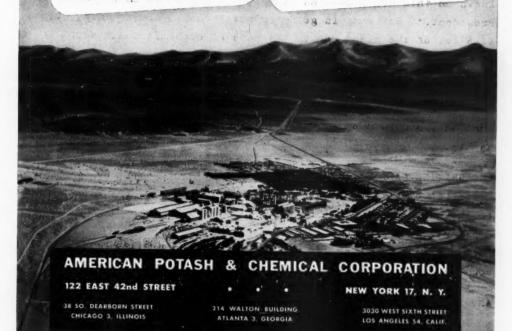


#### TRONA MURIATE OF POTASH

IMPORTANCE Muriate of Potash is a vitally important ingredient which provides the soil nutriment so essential in the formulation of good mixed fertilizers.

PURPOSE To help resist plant diseases and enhance the productivity of crops.

TO ASSURE EFFECTIVE RESULTS Specify "Trona"
Muriate of Potash . . . made by the pleneer producers of Muriate in America.



1. 15.



#### JUST AROUND THE CORNER

By Vernon Mount



SLAPPING DOWN A PRESIDENT is a Congressional sport that is very rarely indulged in, at least to the extent to which HST was slapped as this pre-convention Congressional session rocked to adjournment. Not even Herbert Hoover got the treatment in as concentrated doses.

I HOLD NO BRIEF FOR HST. Some of you may remember that he was long known in this department as "The little man who didn't want to be President." But what is going on now is not Statesmanship, even if a lot of the slaps are on the side of economic soundness.

I DO HOLD A BRIEF for the coalition of Republicans and Southern Democrats who have held the line against socialism in government. They fought valiantly when their number was whittled down so low that only a margin of five or six votes was left on the side of sanity.

THE BRITISH CALL THEIR OFFICIALS SERVANTS...a man is not a "Public Official" over there. He's a "Civil Servant". He may not live up to the name always. But our people too often live up to the implication of "official" which seems to carry the connotation "officious". If we could just elect some Civil Servants in this country, it would be a much nicer place in which to live.

AND I DO BELIEVE IT'S COMING.

Yours faithfully,

Vernon Mount



## RAYMOND PAPER SHIPPING SACKS



Wherever you spread...whatever you spread

Baugherase bodies

do the job better

with more profit

for you!

BAUGHMAN HI-SPEED

RAT-SELF-UNLOADING

#### The Only COMPLETE LINE

- ALLOY STEEL CONSTRUCTION GIVES MAXIMUM PAYLOAD.
- 13 basic agricultural models, each built to do a better spreading job of materials for which designed.
- Lengths from 9 to 33 ft. (5 to 30 tons capacity) . . . 1 to 6 compartments for selective unloading of different materials.
- · Available with single or double spreading distributor.
- Four different gear reductions and drag chain flight spacing

   . . . this controls volume from a few hundred lbs. to 3 or more tons per acre.
- · Complete selection of conveyor bottom widths.
- Controlled volume and spread pattern at any truck speed.
   Oil-sealed clutch and 3-speed transmission regulate rate of discharge from body . . . velocity of spinner remains in constant ratio to engine speed because of direct drive.

971 SHIPMAN ROAD



ASK-3-8



ASK-3W-6



FERTILIZER SPRAYER holds the spread to the ground and makes it stick. Covers up to 4 acres to the mile at 15 miles per hecr.



ROCK PHOSPHATE SPREADER ATTACHMENT gives uniform spreads on the level, slopes and hillsides. Designed to prevent materiols from packing and crusting.



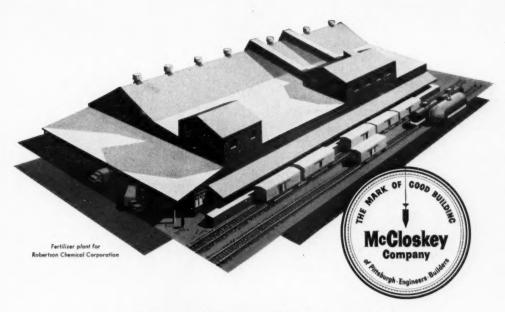
ASK-MS-4
 WRITE FOR FULL INFORMATION AND OUR RECOMMENDATIONS



BAUGHMAN MANUFACTURING

CO., Inc.
JERSEYVILLE, ILLINOIS

"The Pioneers of the Fertilizer Spreading Industry"



## You Get Sound Design, Efficient Construction With McCloskey Fertilizer Plants

The design of your plant is based upon sound engineering principles when you retain McCloskey to plan and erect your new fertilizer processing unit. For, back of "The Mark of Good Building" is the experience gained in designing a number of fertilizer plants which is reflected in our modern approach to the many specialized problems involved in such an operation.

The design helps combat the destructive effects of corrosion—ample room for overhead conveyors is provided by elimination of outdated truss construction—high stacking of material is made practicable—the need for a plant of eccentric shape is provided for. All these vital elements of design are included in your plant when you retain McCloskey to plan and develop your expansion program.

The construction of your new plant gets under way fast when directed by our field engineers. They employ many cost-reducing and time-saving methods that mean your plant is ready for operation faster, your total investment is less than you would expect. You have no details to worry about, the entire project is covered by your one contract with McCloskey.

Some of the best names in the fertilizer industry use McCloskey design and construction service again and again in planning and completing their expansion programs. It will pay you, while your plans are still in the thinking stage to draw upon our experience—you will find it invaluable. Without obligation, we invite you to ask for a consultation. Write McCloskey Company of Pittsburgh, 3412 Liberty Ave., Pittsburgh I, Pennsylvania.

### McCloskey Company

of Pittsburgh
Engineers - Builders



NITROGEN SERVICE FOR FERTILIZER MANUFACTURERS

LION ANHYDROUS AMMONIA—For formulation. A uniformly high-quality basic product. Nitrogen content, 82.25%.

LION AQUA AMMONIA-For formulation or acid oxidation. Ammonia content about 30%. Other grades to suit you.

LION NITROGEN FERTILIZER SOLUTIONS-For formulation. Three types to suit varying weather and manufacturing conditions.

LION AMMONIUM NITRATE FERTILIZER—For direct application or formulation. Improved spherical pellets. Guaranteed 33.5%

LION SULPHATE OF AMMONIA-For direct application or formulation. Large free-flowing crystals. Guaranteed nitrogen content, 21%.



Serving Southern States

Lion provides special technical assist-ance for fertilizer manufacturers. Write us if you have a formulation problem.

#### LION OIL COMPANY CHEMICAL DIVISION, EL DORADO, ARK.

## a new development for users of Open Mouth Multiwalls!

-makes bag top forming easier! -speeds your bag closing operation!

Bag tops can be prepared for closing easier, faster and neater because of the built-in crease in Bagpak PREFORM Multiwall Bags. Bag closing operations are speeded up - and the finished package looks better!

#### REDUCES BAG COSTS!

In many cases, the Bagpak PREFORM crease permits bag lengths to be reduced.

#### SEND COUPON TODAY for full information!

INTERNATIONAL PAPER COMPANY BAGPAR DIVISION 220 East 42nd Street, New York 17, N. Y. Gentlemen: Please send me full information about the new Bagpak PREFORM Multiwall Paper Bags. NAME.

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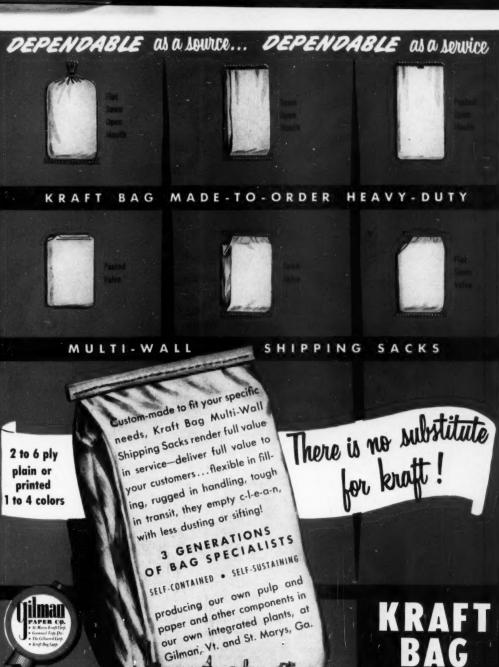


RECOGNIZING THE GROWING
DEMAND FOR AMMONIUM
SULPHATE IN THE MIDWEST,
AND TO BETTER SERVE THE
NEEDS OF FERTILIZER
MANUFACTURERS IN ITS
NORMAL MARKETING AREA
THROUGH A MORE INTIMATE
CONTACT WITH THEM,
INLAND STEEL COMPANY
WILL SELL ITS OUTPUT OF
AMMONIUM SULPHATE DIRECT
TO MANUFACTURERS
BEGINNING JULY 1, 1952.



#### INLAND STEEL COMPANY 38 South Dearborn Street, Chicago 3, Illinois





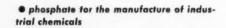
CORPORATION

GILMAN PAPER COMPANY SUBSIDIARY Daily News Bldg., Chicago 6, III.

If your product fits into a bag — we'll make the bag to fit your product.

high grade phosphates

for industry and agriculture ...



- phosphate for the manufacture of complete fertilizers
- natural ground rock phosphate for direct application to the soil

Phosphate mines and plants in Florida at Noralyn, Peace Valley, Achan, Mulberry, in Tennessee at Mt. Pleasant and Wales.



Phosphate division

INTERNATIONAL MINERALS & CHEMICAL CORPORATION

General Offices: 20 North Wacker Drive, Chicago 6

#### CFA Essay

#### Winners Announced

Winners of the 1952 Fertilizer Essay Contest, sponsored by the Soil Improvement Committee of the California Fertilizer Association, have been announced. Joe Filippi, a vocational agricultural student at Chaffey Junior College, Ontario, has been given the grand award of \$75.00. His school was presented the Association's perpetual trophy, which now becomes its permanent property inasmuch as it has won the grand award for three consecutive years. The subject of this year's Essay Contest was "Use of Fertilizers on Irrigated and Dry Land Pastures." Other awards in the amount of \$15.00 each were given to the following, who prepared the most acceptable essay in his school: Jim Graham, Fullerton Junior College; Bill Combs, Oceanside Junior College; Jack Hays, Orange Coast Junior College; Jim Bender, Palomar Junior College: Miles Wemp, Santa Ana Junior College.

#### Mixer Fertilizers IAC Protests High Freight Rates

At its fourth meeting, June 12 the Mixed Fertilizers Industry Advisory Committee asked immediate relief from the effects of authorized increased freight costs which are an addition of 3 to 4 percent to present ceilings, and amount, in and outbound, from 20 to 27 percent of what the dealer pays. Members of the committee present were:

Ray L. King, Georgia Fertilizer Company, Valdosta, Ga.; J. E. Totman, Summers Fertilizer Company, Inc., Baltimore, Md.; C. D. Shallenberger, Shreveport Fertilizer Company, Shreveport, La.; John A. Miller, Price Chemical Company, Inc., Louisville, Ky.; J. W. Rutland, International Minerals & Chemical Corporation, Chicago, Ill.; C. C. Arledge, Virginia-Carolina Chemical Corp., Richmond, Va.; G. T. Cunningham, Armour Fertilizer Works, Atlanta, Ga.; W. T. Wright, F. S. Royster Guano Company, Norfolk, Va.: V. J. Leahy, The Baugh and Sons Company, Baltimore, Md.; A.



This issue represents very well what our industry is doing about The Fifth Plate . . . the problem of feeding a 20% increase in the population.

The two national association conventions were strung upon that thread.

CFA announces the winners of their essay contest whose essence is better pastures, which in turn means more and better meat.

The Del-Mar-Va convention also laid stress on the need for more food.

And the Georgia Plant Food Educational Society, meeting twice in June, and twice more in July—is pounding away at the same basic need.

But it is not enough to talk about the problem in convention. The task of getting ready devolves upon every fertilizer manufacturer, every educator in the farm field, every contact with the farmer that can be swung into the job of teaching him to grow more crop on each of the limited acres available for the purpose.

INDUSTRY CALENDAR

#### Organization Hotel City Date State Aug 17-23 Grasslands Penn State State College Pa. Aug 25-29 Atomic Center Theater Oak Ridge Tenn. U of Ill. Urbana Aug 26-28 Phosphorus III. Sept. 3-5 NAC Essex & Sussex Spring Lake N. J. Oct 22-23 Safety Section Conrad Hilton Chicago III.

Desert Inn

Roney Plaza

M. Eno, G. L. F. Soil Building Service, Ithaca, N. Y.; S. L. Nevins. Mathieson Chemical Corporation. Little Rock, Ark.; W. B. Hicks, Wilson and Toomer Fertilizer Company.

Nov 10-12 CFA

Nov. 19-21 NFA

Jacksonville, Fla.; Fred S. Olmsted. Eastern States Farmers' Exchange. Inc., West Springfield, Mass., and William R. Thurston, Thurston Chemical Company, Joplin, Mo.

Palm Springs Cal.

Miami Beach Fla.



## N7A CONVENTION JUNE 16-18

If there is any doubt in anybody's mind about the size and growth of the fertilizer industry, they can check the increase in attendance each year at the National Fertilizer Association's annual convention at The Greenbrier. White Sulphur Springs, West Virginia, held this year June 16-18. Between eight and nine hundred were in attendance this year, the highest in the history of NFA.

In addition to a very fine business program, planned for the three mornings, there was plenty of entertainment during the remaining hours. Cocktail parties were given by American Potash & Chemical: H. J. Baker & Bro.; and International Minerals and Chemical Corp. There was a garden party, a bridge party for the ladies, a putting contest, golf for both ladies and men, horseshoe pitching, tennis, shuffleboard, dancing each night and a big banquet Tuesday evening.

Highlight of Monday's business program was the open meeting of the Plant Food Research Committee. Interest ran high and a large crowd was in attendance.

The committee participants were: Dick Bennett, Farm Fertilizers; Bill Darner, Tennessee Corporation; Leroy Donald, Lion Oil; Russell Jones. The Nitrogen Division, Allied Chemical & Dye; "Mac" MacDonald, International Minerals and Chemical; Dr. Guy F. MacLeod, Sunland Industries; H. B. Siems, Swift & Co.: Ed Kapusta, Coordinator, NFA. And a guest member of the panel: A. V. Slack, TVA, coordinator of the TVA Committee.

Opening with a statement that the committee exists because research has not been used to maximum advantage in the industry. Chairman G. V. Taylor, Spencer Chemical, pointed out that NFA and TVA have an understanding concerning research and the Committee wishes to suggest research projects to TVA in accordance with that understanding. But first it was wise for our industry to digest the splendid program of research already accomplished by TVA, and Ed Kapusta had been delegated to study and present a report on TVA progress.

During the discussion which fol-

lowed the panel meeting, the following research projects were suggested from the floor:

- 1. Acidulation of rock phosphate to form directly a granular superphosphate.
- 2. Corrosion studies on process equipment used in manufacture of superphosphate.
- 3. Acid concentration and ratio used in super manufacture.
- 4. Study two stage acidulation processes.
- 5. Study of spent acid utilizationtest and study acids from various sources. Effect of acid on properties of fertilizer. Safety and health hazards in use of these acids.
- 6. Technique of mixing fertilizers -stress development of new methods and equipment.
- 7. Fixation of ammonia and byproducts such as lignin, sawdust, peat, etc.
- 8. Fertilizer analysis-rapid plant control methods needed. Correlate chemical evaluation of fertilizer with actual crop response.
- 9. Physical-chemical reactions in fertilizer mixtures.
- 10. Continued studies of solution phase in mixed fertilizers.
  - 11. Hygroscopicity studies.
  - 12. Granulation of fertilizers,
- 13. Effect of ammoniation rates, etc. on crop response to fertilizer.
- 14. Effect of dolomite addition on reactions in mixture. Effect on crop
- 15. Segregation in fertilizer mixtures. Effect size, shape, density of materials. Study effect of particle size of product on crop response.

Tuesday morning marked the opening of the convention proper, and featured the annual convention address of Chairman J. E. Totman, which is extensively quoted elsewhere in this issue.

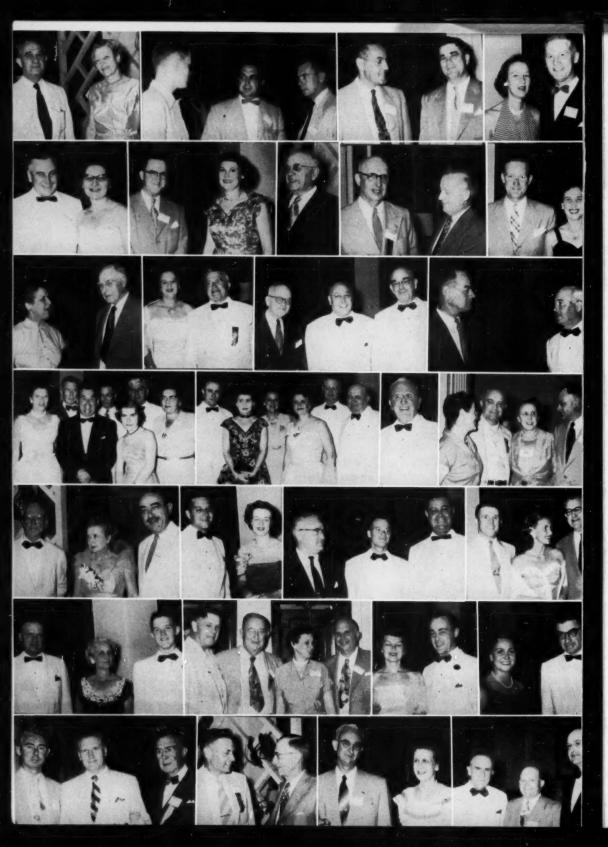
#### KEY TO STAFF PICTURES OF NFA CONVENTION

\*\*EKY TO STAFF PICTURES\*\*

1. Mr. & Mrs. J. E. Totman, and Jimmy Totman. Summers Feetilizer Co., Baltimore-2. Clyde Marshall. Commercial Solvents Corp. New York, R. W. Goldthwatte, Prof. Od. Co., El Dorado, Larry Wrighty Donald. Lion Oil Co., El Dorado, George Wash. Philips Chemical Co., Bartlesville-9, Billy Dovle. Sturtevant Mill Co., Boston, Drive Weatherly, John J. Harte Co. Atlanta. 4. Mr. & Mrs. Tracy Adcock Swift & Co., Chicago, Nelson White. Smith Agric. Chemical Co., Columbus H. E. Balbach, Swift & Co., Chicago, S. Grorge Kingsbury. Kingsbury & Co., Indianapolis. Mrs. R. P. Koos, Kenosha, Mr. & Mrs. J. S. Zapif, Wilminston. all of Swift & Co., W. W. Johnson. Smith-Rowland Co., Norfolk Price, Chicago, Mr. & Mrs. J. S. Zapif, Wilminston. all of Swift & Co., W. W. Johnson. Smith-Rowland Co., Norfolk Price, Chicago, Mr. & Mrs. J. S. Zapif, W. W. Vensble, both of Cornland Plant Foods, Grinnell. 8. B. B. Fall, Rogers & Hubbard Co., Portland, E. S. Russell, Old Geerfield Fertilizer Co., South Deerfield Graham Campbell, Chamberlain & Barclay, Cranbury. 9. Walter Nordquist. U. S. Steel Co., Pittsburgh, Mr. & Mrs. H. H. Tucker, Coke Oven Ammonia Research Bureau, Columbus. 10. Mr. & Mrs. Barney Tucker and Miss Alice Tucker, London Ky., Mr. & Mrs. Bennett Brown, Knoxville, all of Knoxville Fertilizer Co., 11.

OF NFA CONVENTION

Mrs. R. Q. Smith, Mr. & Mrs. Weller Noble, Pacific Guano Co., all of Berkelev, 12. Misson Corolly Freyesion, Wm. S. Rithour, and Miss Mrtam C. Vance, all of NF Actions of the New York of York of



John H. Stambaugh, assistant to the Secretary of Agriculture, then spoke on Agriculture as an American business opportunity. "You are looking at one of your customers" was his opening-and his theme-the huge, expanding domestic market for agricultural commodities. 6000 new customers for food and fiber are being added to the farmer's market every 24 hours, he said.

Industrial wages help support agriculture. Agricultural returns help sustain the market for industry's goods. They are dependent upon one another. And they are much alike, for the farmer is really a capitalist, with his investment in land, buildings, machinery, livestock and crop inventories. And he has his problems of labor, materials, production, marketing, credit, taxes and price.

With apologies to the sales organization of the industry, he said we are selling a product that just can't miss, once its results have been demonstrated, and spoke at some length on the need for better transmission of farming knowledge down from the Land Grant Colleges to the people who work the land.

Following this U. S. Senator Karl E. Mundt (South Dakota) spoke on "Where To in 52."

Senator Mundt, a compelling and vigorous speaker, warned the group that unless business gets interested in politics, politics will get increasingly interested in business. quoted George Washington who said, "Beware of government, it is a dangerous servant, a fearful master." All of our forebears, he said, came to this country for freedom, founded it on freedom of all kinds, but in these more than 300 years of building this great country on these freedoms, we have become importers of foreign ideologies, have allowed foreign definitions of security to creep into our thinking, all of them contrary to our own-that of free enterprise. Our political system today is burdened with what he called "malignant government-itis," champions of this political control over our business and personal lives being the fuzzieminded theorists, those who seek to expand political power for personal reasons, and alien-minded communists. A political system must survive and work during adversity, and, he warned, too much political

control does not stand up in a time of adversity.

The nominating committee report, and the submission of the budget concluded that session.

The final business session opened with President Russell Coleman's annual address, which took the form of a report to NFA stockholders, although he said at the outset "You cannot measure NFA's success or failure through a profit and loss statement." But he set up these assets: Fifty years of service to its members. In that period, \$5,000,000 has been invested in the corporate enterprise. It has stimulated new and better uses for fertilizer. It has served as a liaison between government and the industry. It has helped secure critical materials during emergencies. It has produced books which are texts in many colleges, color slides, pamphlets and films that have been shown to almost two million people.

As a problem for the immediate future he recited the need for more major ingredients that were used in the peak year of 1951-and to maintain a healthy, growing industry.

Milton S. Eisenhower, President of The Pennsylvania State College. and a brother of "Ike", was next presented, and spoke on "Framework for Peace." His theme was the obligation all of us have to help build positive peace in a tortured world. His feeling was that this is not only the function of the Secretary of State, but of every citizen.

Over a quarter century Dr. Eisenhower has been close to international affairs, especially as they apply to the food problems of the world. From out of this experience he recognizes we are in a position we have never encountered before, after all our years of complete success in everything we have undertaken as a nation. Today the situation is quite different. We are in a struggle for mastery of men's minds and their

His framework for peace divides into two periods-the first one of overwhelming power, military pow-

(Continued on page 37)

#### OF NFA CONVENTION ← KEY TO STAFF PICTURES

\*\*EEY TO STAFF PICTURES\*\*

1. Mr. & Mrs. Arch Carpenter, Mathieson Chemical Corp.. Baltimore. 2. T. W. Allen, Jr., Sand Mountain Fertilizer Co., Attalla. John Hall. Washington, and Ed Smith, Riveria Beach, both of Potash Company of America. 3. Malcolm McCorpany of America. 3. Malcolm McCorpany of America. 3. Malcolm McCorpany of America. 4. Mrs. G. Mrs. & Gulf & Mrs. & Mrs. & Gulf & Mrs. & Mrs. & Gulf & Mrs. & Mrs. & Mrs. & Gulf & Mrs. & Mrs. & Mrs. & Gulf & Mrs. & M

OF NFA CONVENTION

port Fertilizer Works, Shreveport. 16.

John C. Mooar, Sturtevant Mill Co. Atlanta, 17. Mr. & Mrs. J. H. Epting, Epting

Distributing Co., Leesville, Mr. & Mrs.

Fred Purcell, Combustion Engineering—

Super Heater, Inc., Atlanta, 18. J. E. Henderson, Jr., H. J. Baker & Bro., Savannah,

Mrs. J. K. Plummer, Atlanta, Walter

Grahn, H. J. Baker & Bro., Tampa, 19.

Mr. & Mrs. Sid Rydell, Swift & Co., Chicago, 20. Frank Greeley, Fulton Bag &

Cotton Mills, New Orleans, Baird Green,

Jackson Fertilizer Co., Jackson, Roy Gurkin, Fulton Bag & Cotton Mills, Raleigh

21. Mr. & Mrs. Ward Cole, Jos. C. Jett Co.,

Norfolk, Fred Bryan, Chilean Nitrate Sales

Corp., Atlanta, 22. Mr. & Mrs. T. W. Allen,

and T. W. Allen, Jr., Sand Mountain Fer
tilizer Co., Atlanta, 23. Frank Seymour,

Weils Fertilizer Co., Goldsboro, F. N.

Bridgers, Farmers Cotton Oil Co., Wilson,

Mr. & Mrs. R. S. Bostick, Hammond Bag

& Paper Co., Charlotte, 24. Mr. & Mrs. Bill

Morgan, International Minerals & Chem.

Corp., Chicago, 25. Mr., & Mrs. Jason

Elsas, Fulton Bag & Cotton Mills, New Morgan, International Minerals & Chem. Corp., Chicago. 25. Mr. & Mrs. Jason Fisas, Fulton Bag & Cotton Milia, New Orleans. 26. Pielding Reed, Atlanta, Dr. H. B. Mann, Washington, both of American Potasi Institute, 27. The Proceedings of the Co., Chicago, Harry Baylor, International Minerals & Chemical Corp., Chicago. 28. Mr. & Mrs. George Moyers, International Minerals & Chemical Corp., Chicago. 29. George Suggs, Nitrogen Div., Allied Chemical & Dye Corp., New York, Sherman Hoar, Nat'l Assoc. County Agents, Sterling, Dr. B. D. Cloaninger, Assoc. American Fertilizer Control Officials, Clemson.



#### **KEY TO NFA PICTURES**

1. Bill Scanlon, Phillips Chemical Co., Bartlesville, Dr. E. B. Anderson, International Minerals & Chemical Corp., Chicago, L. Art Schultz, Reading Bone Fertilizer Co., Radding, Dr. J. F. Fudge, Texasphia, Jim W. Bone Milliam Fertilizer Co., Laurel, Bob Fischer, Milford Fertilizer Co., Laurel, Bob Fischer, Milford Fertilizer Co., Milford, Bill Schnaffitt, Stedman Foundry & Machine Co., Inc., Philadelphia, E. S. Valliant, Jr., E. S. Valliant & Son, Centreville, 4. Dr. J. K. Plummer, Tennessee Corp., Atlanta, M. D. Broadfield, Arkansas Farmers Plant Food Co., North Little Rock. & Frank Kennedy, Potash Co. of America, Peoria, Dr. Arthur

Kapusta, NFA, Washington, A. V. Slack, TVA, Sheffield. 15. Mr. & Mrs. Burton Ford, St. Regis Sales Co., Allentown. 16. Mr. & Mrs. F. W. Atkinson, Hartsville, W. L. Baughcum, East Point, and C. H. Eirod, Montgomery, all of International Minerals & Chemical Corp. 17. W. A. Maddox, Jr. and Joe Harrell, both of Southwest Potash Co., Atlanta. 18. W. E. Weems, American Cyanamid Co., Louisville, Bruce Gleissner, American Cyanamid Co., New York. 19. Ed Smith, Potash Company of America, Riveria Beach, W. L. Gay, Berk, Shire Chemicals, New York, B. B. Fall, Rogers & Hubbard Co., Portland. 29. Mr. & Mrs. Charles McDowell. Winter Park, Fla., 21. Warren Huff, Ashcraft-Wilkinson Co., Columbus, Dr. Harold C. Knoblauch, USDA, Office of Experiment Stations.

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### SCRAP, LOOMS AMONG CONDITIONERS

We are reminded of the situation which developed during the 30's when the fertilizer industry plunged itself into the battle of the minor elements. One manufacturer claimed a few. The next added to the number claimed . . . and after a number of companies had joined the fray somebody was claiming more minor elements than most agronomists knew, and the farmer was thoroughly confused.

Such a situation is developing among the soil conditioners in their frantic haste to capture this new, interesting and no doubt profitable market. The press gave the new product a wonderful send-off, and a number who followed the leader, Monsanto, operated on a strictly "me too" basis—cashing in on "the widely publicized wonder chemical" as they called it.

The claims have been fantastic in some cases. This may be due to the ignorance of dealers, or to overenthusiasm on the part of some manufacturers—but the public must be confused, and we know mighty few dealers have any clear idea of what a polyacrylate will really do.

And there are a lot of them. Arci-Soil, Aerotil, Agrilon, Fluffium, Terra Kem, SoiLife, Poly Ack—and future products now getting into production at B. F. Goodrich, Du-Pont and others.

Meanwhile, Monsanto has abandoned polyacrylate, and their new Merloam formulation, which is being sold nationally, is of an entirely different formula.

The conditioner market is, of course, a big one. As the price goes down the use will expand from the window-box field, to the wider acreage of agriculture. And the price is already going down.

But unless a little more care is injected into the minds of the advertising writers who work for a few of the formulators, and quite a few of the dealers, the public may become thoroughly disgusted, and forget the whole thing. It has happened!

#### Davison Chemical Issues Catalyst Data Sheet

A product data sheet on Activated (Leached) Raney Nickel Catalyst has been issued by The Davison Chemical Corporation, Baltimore 3, Maryland. Write the Technical Service Department for copy of this new data.

### USDA STUDY OF SUPERPHOSPHATE AND WET PROCESS ACID INDUSTRIES

See Table Next Page

J. Richard Adams, T. H. Tremearne, K. D. Jacob and L. G. Porter are co-authors of a report by USDA on the status of superphosphate and wet-process phosphoric acid production in the United States. The report covers 44 pages of text and tables, one of which is reproduced in this issue, which represents a thorough study of the industry. The work was done by the questionnaire method, with 100% response, and the data was compiled in such a way as not to reveal individual operations.

As of September 1, 1951, there were 202 plants producing normal superphosphate, 13 plants producing wet-process phosphoric acid, and 9 plants producing triple superphosphate. Of the 202 normal superphosphate plants, 91 had coexisting acid facilities. Two additional normal superphosphate plants were located outside of continental United States, one in Hawaii and one in Puerto Rico.

The total domestic production of normal superphosphate expressed as equivalent 18 percent superphosphate was 9,557,498 tons in 1950 and 5.274.223 tons in the first half of 1951. The average P.O. contents of the normal superphosphate and wetbase goods produced in 1950 were 19.3 and 11.3 percent respectively. The 1950 production of normal superphosphate was obtained by acidulating 5,251,412 tons of phosphate rock with 3,156,495 tons of sulfuric acid (basis 100 percent HaSO,), Florida was the source of 96.7 percent of this rock, Tennessee, 1.3 percent, and

the West, 2.0 percent. Only 8.7 percent of the sulfuric acid used was spent acid. The rest was virgin acid and 83.6 percent of this was made from elemental sulfur.

The nine triple superphosphate plants produced 660,134 tons of equivalent 45 percent superphosphate in 1950 and 357,738 tons in the first half of 1951. The 1950 production averaged 46.0 percent of available P<sub>2</sub>O<sub>2</sub>. The industry used 274,122 tons of rock in 1950, of which 225,-993 was mined in Florida, 7,805 in Tennessee, and 40,324 in Idaho and Wyoming. On the basis of equivalent 50 percent H<sub>2</sub>PO<sub>2</sub>, 490,952 tons of wet-process acid and 126,519 tons of electric-furnace acid was used to acidulate the rock.

The wet-process phosphoric acid companies used 1,062,930 tons of phosphate rock and 859,780 tons of sulfuric acid (basis 100 percent H<sub>s</sub>SO<sub>t</sub>) to manufacture 879,215 tons of phosphoric acid (basis 50 percent H<sub>s</sub>PO<sub>t</sub>). The rock tonnage was made up of 885,424 tons from Florida, 29,405 from Tennessee, and 148,101 from Idaho and Wyoming. The sulfuric acid derived from elemental sulfur amounted to 668,864 tons.

Byproduct fluorine-containing compounds recovered in the production of normal superphosphate and wet-process phosphoric acid amounted to 24,144 tons in 1950 and a production of 26,908 tons was anticipated in 1951. These products were fluosilicates of sodium, potassium, ammonium, zinc, and magnesium, hydrofluosilicic acid, and sodium fluoride.

Table 2.--Capacity of plants maufacturing normal superphosphate, as of Soptomber 1, 1951.

Region and State	Number of plants	Annual productive capacity	Portion of total productive capacity	Storage capacity	Ratio of productive to storage capacity
		Short tons	Percent	Short tons	
New England	4	299,500	1.8	63,000	4.8
Middle Atlantic	14	1,941,234	11.7	240,500	8.1
N. Y., N. J., and Pa.	7	734,000	4.4	69,500	10.6
Md.	7	1,207,234	7.3	171,000	7.0
South Atlantic	71	5,610,038	33.9	821,500	6.8
Va.	11	1,156,600	7.0	130,500	8.9
N. C.	12	818,300	5.0	96,000	8.5
S. C.	12	882,000	5.3	150,000	5.9
Ga.	29	2,219,805	13.4	350,000	6.3
Fla.	7	538,333	3.2	95,000	5.6
Bast North Central	45	3,854,823	23.3	438,000	8.8
Ohio	17	1,241,531	7.5	176,500	7.0
Ind.	9	753,646	4.6	30,000	9.4
Ill.	12	1,245,000	7.5	120,500	10.3
Mich. and Wis.	7	614,646	3.7	61,000	10.1
West North Central	11	637,200	3.9	72,200	8.8
Iowa, Nebr., and Kans.	5	317,200	1.9	34,500	9.2
Mo.	6	320,000	2.0	37,700	8.5
Bast South Central	37	2,322,950	14.1	398,500	5.8
Ky. and Tonn.	14	989,950	6.0	194,000	5.1
Ala.	14	793,000	4.8	122,000	6.5
Kiss.	9	540,000	3.3	82,500	6.5
West South Contral	15	1,319,000	8.0	156,000	8.4
Ark. and Okla.	4	383,500	2.3	58,000	6.6
La.	6	531,000	3.2	54,000	9.8
Tex.	5	404,500	2.5	44,000	9.2
Mountain and Pacific	5	553,000	3.3	132,000	4.2
Continental U. S.	202	16,537,745	100.0	2,321,700	7.1

Expressed as short tons of equivalent 18 percent superphosphate for a work year of 300 two-shift days, with adequate supplies of phosphate rock and sulfuric acid and adequate storage facilities.

#### Quotes from the

#### NFA CHAIRMAN'S ADDRESS

By JAMES E. TOTMAN

We have just finished a fertilizer season which, for most of us, has blought some sort of a headache from the standpoint of obtaining raw materials from which to manufacture our own goods. I have tried to obtain some idea of what is ahead of us along these lines for the coming 1952-53 season.

The best information obtainable indicates we used for fertilizers this past season about 1,375,000 tons of nitrogen in all forms, of which about 63 percent was in solid and 37 percent used in liquid form. You are all familiar with the fact that the U. S. Department of Agriculture has asked for an increase of 900,000 tons of fertilizer nitrogen over that used in 1951, by 1955. Of this new output about 23 percent is requested to be in liquid form and 77 percent in solids. These percentages are in the right direction as you all know because our principal shortages of nitrogen now are in the solid forms. I wish to point out also that we are already near our maximum use of liquid forms to ammoniate the superphosphate we now produce, and for the coming year there is little prospect for additional super to ammoniate.

All the indications are that there will be at least 1,500,000 tons of N available for agriculture for 1952-53.

Solid forms are short—particularly sulphate of ammonia.

Until we have greater quantities of sulfate of ammonia or find some new methods of formulating, it may well be that a large percentage of our nitrogen for row crops and small grains will have to be applied as top or side dressing. As long as sulphate acid remains in such short supply we are not going to be able to obtain the quantities

of sulphate of ammonia that are needed to enable us to fulfill the goals set by the U. S. Department of Agriculture.

Although we had little more available phosphoric acid for use in the 1951-52 season than had been anticipated production in each of the last few months has been lower than in the corresponding month a year ago, due to the curtailment in the sulfur available for agricultural use. The USDA report recently issued states that for 1951-52 there would be a deficit of 650,000 tons of sulfur in the sulfur requirements of agriculture.

In other words, much of our increased needs for available phosphoric acid in the future will have to be obtained in forms other than superphosphate. If it should come to pass that the use of sulfuric acid by defense industries should slow down, more of it can be obtained for superphosphate production.

Our potash picture is better. The five older companies are all producing at top capacity, slightly more than last year. One new operator has recently started producing in the Carlsbad area and one more mine in the same area is expected to be able to begin shipments in November of this year. Imports also are expected to be somewhat higher than the 325,000 tons of K<sub>2</sub>O imported in 1951. It has been reported that a very large new deposit of potash has recently been located by one of our large companies not presently in the potash business. Definite official estimates for 1952-53 are not yet available but it appears possible that capacity for enough tons of new K:O production will by then be in operation to furnish some 15 percent more potash than was used this past year.

So-our Raw Material position for the coming year is, barring the unforeseen, considerably better and I trust will leave us with less head-aches than the past year.

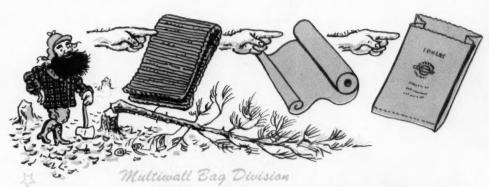
For a few minutes this morning I should like to discuss with you my conception of the was, the is and the will be of the fertilizer industry, now just over a hundred years old. During at least two-thirds of that time our good agricultural land was capable of growing, with its native fertility, all of the crops necessary to feed the population. As the earlier cultivated soils of the Eastern part of our country began to lose their fertility through the annual removal of crops and produced less and less each year, it was only necessary to begin cultivation of additional virgin acres farther west.

All our good agricultural land is in use and long has been.

If present population trends of six to seven thousand additional people every day continue, there will be in 1960 only 2 acres per person under cultivation. At the present acre rate of crop production, by 1975 it would take a hundred million more acres of good land to grow the crops needed to feed the thirty-eight million additional population expected by that time. The problem begins to acquire a truly serious aspect—there is no more good land.

Our industry is challenged to meet the need. If we fail to do so, there is always the threat faced in previous years, though quiescent in recent years because of our industry's achievements, of additional government production. In my opinion we can and will meet the challenge with the same spirit and effect of private enterprise, that has kept our industry serving agriculture so well through the years. It will not be an easy accomplishment. It will take the foresight and courage of all of us to meet the many problems involved.

Before 27th Annual Convention, White Sulphur Springs, June 17, 1952.



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There must be monumental changes in our industry over the next few years if we are to meet the challenge successfully. For a hundred years we have pursued one production path. We have made superphosphate by the same process during that time with only minor chemical perfections and in some cases important mechanical perfections. We have compounded, with this basic commodity, various nitrogen and potash carriers to produce our commercial product of mixed fertilizers. True, from time to time we have added new nitrogen compounds and learned how to utilize others hitherto considered impractical. We have by better refining methods produced higher analysis potash materials. We have perfected production of concentrated superphosphate and various ammonium phosphate materials. In the main, all these new compounds are more concentrated than the old and they have enabled us to furnish the farmer higher analysis mixtures. The average plant food content of fertilizers today is about 50 percent higher than it was twenty-five years ago. This is a laudable achievement, as is the fact that we are able to place our products in the hands of the farmer at a price which enables him to produce five or more dollars in extra crop value for every dollar's worth of fertilizer used.

Yes, we believe we have served American agriculture well. The U. S. Department of Agriculture has gone on record to the effect that at least 25 percent of our present crop production is directly caused by the use of fertilizers. This means that if there were no fertilizers used, it would take close to a hundred million more good acres to grow the crops we now produce.

Our industry is being criticized by some government officials as being laggard in our efforts to meet the scarcity of available phosphoric acid. The nitrogen and potash supply problem, when you include import probabilities with domestic production outlook, seems well in hand. Not so the immediate phosphate problem. It seems apparent that we must look to other sources than superphosphate because of the current shortage of sulfur and the evertent shortage of sulfur and the evertent shortage of sulfur and the

dwindling reserve supply.

During the last few months a number of fertilizer manufacturers have begun serious consideration of the several processes using nitric acid in the production of available phosphates. The Tennessee Valley Authority, as most of you know, is operating a pilot plant which, among other processes being tried out, has a promising one which acidulates with a mixture of nitric and sulfuric acids, ammoniates, adds potash and produces a complete fertilizer. Of particular interest in most of these processes is that the ammoniation of the acidulated product requires as much anhydrous ammonia as is used to manufacture the nitric acid used in acidulation. One of the obstacles would seem to be the probable necessity for large completely integrated plants including nitrogen fixation plants, nitric and sulfuric acid plants, acidulating plants and mixing plants, complete to the bagging machines handling the final product, necessitating an investment of many million dollars.

Our industry now has some 205 (Continued on page 40)



## APFC CONVENTION - JUNE 19-22

With a full attendance and an excellent balanced program the American Plant Food Council met at The Homestead, Hot Springs, Virginia, June 19-22 . . . a convention packed with serious business, and fine entertainment, too. The ladies had a tea, a bridge party, putting contest and golf tournament; the men turned out for golf on the two beautiful courses available to The Homestead. and for tennis on the courts near the Casino where luncheon was enlivened by hotly contested matches. There was a bingo game one night, and dancing in the ballroom each night, and of course the banquet at the close of the convention. Potash Company of America and Southwest Potash Corporation were hosts to the entire membership at cocktail parties, in addition to the numerous smaller gatherings.

The convention's business program started Friday morning; APFC president Paul Truitt opened it with his address pledging full support of the industry in the effort of farmers to feed the rapidly increasing population out of the limited existing cropland. "Each year since 1938," he said, "the fertilizer industry has reached a new high in delivering fertilizer to farmers" . . . 71/2 million tons in 1938 and a demand today of more than 21 million tons.

Professor C. J. Chapman, University of Wisconsin, followed with a talk in which he described pastures as a "neglected crop" and urged improvement of pastures so that "the magic wand of nature . . . nitrogen backed up with an abundance of phosphate and potash, together with the bounties of sunshine and rain, set the table full to overflowing with protein rich feed for hungry cattle."

Dr. H. F. DeGraff, Cornell University, followed the line that more crop must come from a fixed acreage, with 157 millions eating from the same acreage that fed 106 million people in 1920 and pointed out that an increasingly intimate partnership has come into being between scientific research, the industry and the farmer.

The Annual Business meeting followed and closed Friday's session. Saturday's session led off with a talk by Representative Harold D. Cooley of North Carolina, who said that "The Congress in interested in providing the working machinery which will achieve a better standard of living for all our people . . . not a program of scarcity or of surplus beneath which the man on the farm may be buried while the rest of the people go in want.

"The Government," he continued. "must assure those who till the soil that they will not be penalized by abundance, and protect against temporary or transitory super-abundance. The Government is not charged with the responsibility of protecting farmers against a chronic over-production of any agricultural commodity."

Followed an agricultural forum, presided over by Dr. Paul D. Sanders, Editor "The Southern Planter," with a panel composed of Dr. Byron T. Shaw, USDA; O. V. Wells, USDA; D. Howard Doane, Doane Agricultural Service; Herschel D. Newsom, Master, The National Grange.

They spoke of a fair return for the farmer, sound land management, legislation without regimentation. adequate farm tools at a price the farmer can afford, further gains from research, more crops from the same land, heavier initial applications of fertilizers to lift the level of production on the farm, the danger that government may swallow us one at

#### KEY TO STAFF PICTURES OF APFC MEET

KEY TO STAFF PICTURES

1. R. W. Goldthwaite, Lion Oil Co., El Dorado, C. W. Baldwin, U. S. Steel Co., Pittsburgh, Jack Clinton, U. S. Steel Co., Pittsburgh, Jack Clinton, U. S. Steel Co., Pittsburgh, Walter E. Nordquist, U. S. Steel Co., Pittsburgh, Leroy Donald, Lion Oil Co., El Dorado, 2. Mr. & Mrs. Gordon Cunningham, Mr. & Mrs. A. H. Sterne all of Tennessee Corp., Mr. & Mrs. John Sanford, Armour Fertilizer Works, all of Atlanta. 3. Billy Steele, Jr., Southern States Coop., Richmond, Allen Brent Southern Fertilizer & Chemical Co., Savannah, Frank Wilson, Stagson Corp. Charleston. 4. Mr. & Mrs. C. B. Clay Cotton States Fert. Co., Macon, Mr. & Mrs. Billy Doyle, Sturtevant Mill Co., Boston. 5. MacRea Parker Jr. American Condo. The Mrs. L. J. B. Whitney Chemical Construction Corp., New York Condo. The Mrs. L. J. B. Whitney Chemical Construction Corp., New York George Burns, Chase Bag Co., Chicago, Mrs. Sam Hardwick, Richmond, Dean Gidney, U. S. Potash Co., New York (Note). Seems as if Dean is baiancing a tray of glasses on his headmistead, a waiter passed back of him just as picture was snapped. 8. Mr. & Mrs. J. E. Ames, Jr., Robertson Chemical Co., Norloke, Jas. Naftel, Pacific Coast Borax Co., Aburu Mr. S. Mrs. Co., New York, 10. Bill Scanlon, Phillips Chemical Co., New York, 10. Bill Scanlon, Phillips Chemical Co., Bertiesville, Archie Edwards and Joe Griffin, both of Oklahoma Citty, Jack Bryant, Phillips Chemical Co., Tampa, 11. Earl Gettinger, Woodward & Dickerson, Philadelphia, Al Dickinson, Virginia-Carolina Chemical Corp.

Bradley, Potash Company of America Peoria, 12, Jack Daughtridge, E. I. Du Pont de Nemours & Co., Wilmington-Frank Wilson and C. D. Bell, both of Stagson Corp., Charleston, 13, Mr. & Mrs Robert Ashcraft, Norfolk, George McCarty, Atlanta, John Foy, Jr., Tampa, all of Ashcraft-Wilkinson Co. 14, Maywood Snyder, Coop. Fert. Service, Richmond, Mr. & Mrs. George D. Morgan, Jr., Morgan Bros. Bag Co., Richmond, Otto Bernhardt, and Wm. C. Richardson, both of Coop Fert. Service, Richmond, 18, Borders Chronister, Ed Harvey and M. E. Hunter all of Nitrogen Div. Allied Chemical & Dye Corp. 16, Mrs. C. L. Paul, Charleston, Keyes Sanders, Mero Co., Gaffney, Mrs. Ashmead Pringle, Ashmead Pringle, Ashmead Pringle, Ashmead Pringle, Act., Charleston, Keyes Sanders, Mero Co., Gaffney, Mrs. Ashmead Pringle, Co., Inc., all of Charleston, 17, Walter Harding Woodcock, Charleston, Ch George McCarty, Ashcraft-Wilkinson Co. Atlanta

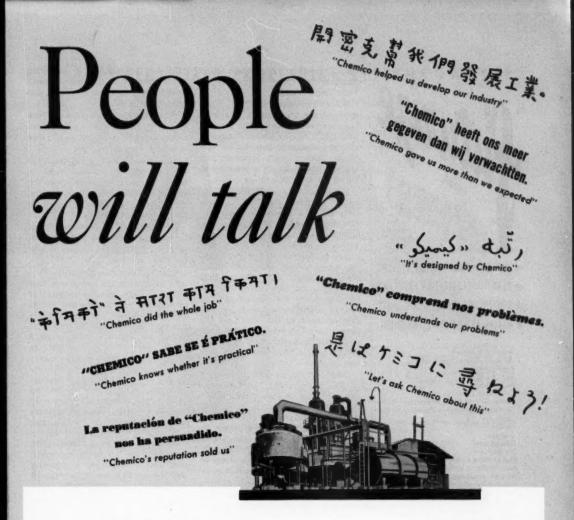


#### KEY TO APFC PICTURES

1. James German. American Cyanamid Co., Samuel Strelzoff, Chemical Construction Corp., and Bill Holland, American Cyanamid Co., all of New York. 2. Paul Regan., American Cyanamid Co., Mrs. On Construction Corp., all of New York. 2. Mrs. W. A. Minor, Washington, and Dr. K. D. Jacobs, Beltsville, all of USDA. 4. Joe Howell, Virginia-Carolina Chemical Corporation, Richmond, Albert Woods, Commercial Solvents Corp., New York. 5. T. R. Cocks, Farmers Coop. Fertilizer Purch., Kenbridge, T. L. Wilkerson, American Cyanamid Co., New York, Keyes Sanders, Merco Co., Gaffney. 6. C.

E. Littlejohn, U. S. Potash Co., Columbia, Joseph Griffin and A. T. Edwards, Oklahoma Fertilizer & Chemical Co., Oklahoma City 7, Mr. & Mrs. W. B. Copeland, Smith-Douglass Co., Norfolk, 8, Mr. & Mrs. C. S. Compand, Smith-Douglass Co., Norfolk, 8, Mr. & Mrs. C. S. Compand, S. F. Thornton, F. S. Royster, Norfolk, W. T. Wright, F. S. Royster, Norfolk, M. T. Wright, F. S. Royster, Norfolk, 18, Mr. & Mrs. Omar Sanders, Fertilizer Industries, New York, 11, B. D. Gleissner, American Cyanamid Co., New York, Frank Clement, Melson Fertilizer Co., Georgetown, 12, Mr. & Mrs. John Watts, Armour Fertilizer Co., Allanta, 13, Mr. & Mrs. Fred Purcell, Combustion Engineering, Superheater, Inc., Raymond Pulv. Div., Atlanta, Tom Athey, Albemarie Paper Mig. Co., Richmond, 14, Miss Helen Reed, Mr. & Mrs. Robert Keed, Country Gentleman, Philadelphia, 13, R.

W. Smith, Chemical Packaging Corp., Savannah, Chas. Mittleman, Kraft Bag Corp., New York, 16. Paul Prosser, Baugh & Sons Co., Baltimore, Dale Kieffer, Smith-Douglass Co., Norfolk, 17. John R Detgen, Naco Fertilizer Co., Fit. Prince, 16. Cecil Arledge, Virginia Carolina Chemical Corp., Richmond, Dr. H. F. DeGraft. Cornell University, Ithaca., Paul Truitc, AFFC, Washington, 19. John Sanders, Spencer Chemical Co., Atlanta, J. S. Schrock, Schrock Fertilizer Service, Congerville, 20. Bowling on the green: Fred W Heidinger, Bennett & Clayton Co., Prospect Plains, Lee O., Karp. Morris Karp & Son, Farmingdale, W. E. Schaffnitt, Stedman Foundry & Machine Co., Philadelphia, S. P. Batchelder, Long Island Produce & Fert. Co., Long Island, 21. C. J. Chapman, University of Wisconsin, Madison,



When our representatives travel to the far corners of the earth, they find that word of Chemico's activities has gone before them.

Yes, people will talk . . . and carry the news of Chemico accomplishments in the design and construction of plants for the production of heavy chemicals: fertilizers for India, Mexico, the Philippine Islands and Egypt; sulfuric acid for Canada, England, Formosa and Brazil; urea for Japan; sulfur recovery for Colombia; pickle liquor recovery for

the Union of South Africa, to name a few. And naturally these are in addition to numerous largescale projects in the United States.

Chemico has created, designed and erected more than 800 installations during the past 37 years that have given people much to talk about. That's why "Discuss it with Chemico" has become a byword of those who need new facilities or additional plant capacity to meet the world's ever-expanding heavy chemical needs.

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- \* PLANT MODERNIZATION PROGRAMS
- \* CONTINUOUS AMMONIATION UNITS
- \* MIXING AND SHIPPING EQUIPMENT

**Aerating Equipment Automatic Control Equipment Basing Units Belt Conveyors Bucket Elevators** Centralized Control Systems Continuous Acidulating Processes Continuous Ammoniating Systems Conveyors Coolers Crushers **Disintegrators Dry-Mixing Units Dust-Arresting Equipment** Fume Scrubbing Systems Hoppers and Spouts Materials Handling Equipment Milling and Screening Units **Multiple Hopper Batching Systems** Oil Fired Dryers Plant Mechanization Systems **Pneumatically-Operated Gravity Batch Mixers** Pneumatically-Controlled Valves **Pulverizers** Sackett Timken Bearings Sacking Units Scales Screens Shipping Units Shuttle Belt Conveying Systems Tailing Mills Vacuum Condensing Systems

PRODUCTION PROBLEMS get Sackett

THE A. J. SACKETT & SONS CO. 1727 S. HIGHLAND AVENUE BALTIMORE 24, MARYLAND a time, promotion of efficient use of fertilizer and lime,—with many detours and addenda.

Virginia's Senator Harry F. Byrd, supplied the final climax to a busy business session, and to the convention with a talk on America standing at the crossroads where we can choose between state socialism and ultimate disaster, or a strengthening of the freer enterprise system.

He pointed to the "British example" for those who think" 'a little socialism' is a good thing" and emphasized "from what we see in England we would be the most stupid nation on earth if we allowed ourselves to become further embraced by the socialism which has been creeping upon us," adding that "socialism and free enterprise cannot live under the same roof." He termed Winston Churchill "the greatest man in the world of his generation" but voiced doubts that under his leadership England could return to the "free enterprise system."

Senator Byrd viewed "the record of Mr. Truman, the tax collector" and said that in less than six and one-half years, including only three months of World War II, Mr. Truman has taken from the people in the form of Federal taxes seven billion dollars more than was paid into the Federal Treasury in the previous 156 years of our existence as a nation."

Viewing what he termed as "the record of Mr. Truman, the spend-thrift," he said that "from the Administration of George Washington to the beginning of World War II, Federal expenditures totaled 179 billion dollars" and "from the end of World War II, in six years under Mr. Truman, the Federal expenditures totaled 260 billion dollars or 81 billion dollars more than the entire life of our Nation, excepting the three and one-half year period of World War II."

Asking "how much further can we go in this reckless financial irresponsibility," Mr. Byrd said "the Federal Government is spending your money at the rate of \$2,000 every time the clock ticks" and the "Federal Government is collecting taxes from you at the rate of nearly \$1,600 every second of every day and every night."

"The Federal Government," he added, "is adding to our public debt, through deficit spending, at the rate of \$400 a second.

"Americans are paying nearly 30 per cent of the national income in taxes. Our taxes have reached the confiscatory stage, which means that new taxes will probably result in diminishing returns."

He said that more than 10 per cent of the taxes the Federal Government "takes from us goes to pay ourselves interest."

"The reckless spending of the Truman Administration has precipitated a Federal fiscal crisis which many of us may not fully realize but, unless we retrench, we can anticipate a constant deterioration of our currency and credit," Senator Byrd said. "There is only one road to solvency, and that is to stop spending money we do not have by elimination of every single non-essential disbursement. Yet, every effort by Congress to retrench is vigorously opposed by the President and his cohorts. There is, in my opinion, only one untouchable item in the budget of the Federal Government. and that is the interest on the public debt. This we must pay as a matter of honor and to preserve the value of our bonds."

He said "the one over-shadowing characteristic of the Administration now in Washington is fiscal weakness and irresponsibility," adding that "if American democracy is destroyed, it will be the result of fiscal irrisponsibility of which the present Administration is guilty."

Senator Byrd asserted "our free enterprise system is a greater deterrent to Russian aggression than the United Nations ever will be" and declared "socialization of our industry would be just as deadly to the productive capacity of our system as Russian totalitarianism."

Hs said "present signs indicate an engulfing global war is **not** in the Russian plans for the immediate

#### SACKETT FERTILIZER PROCESSING SYSTEMS PAY OFF



These fast fertilizer processing systems have reduced production costs in some plants as much as 65% . . . An estimated cost savings included with a Sackett survey of your production operations may even exceed this figure.

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- 3. Circular design of storage hopper accelerates flow of ingredients through weigh valves . . . no corners or valley angles to retard flow of material.
- 4. Its compact design permits installation in existing buildings with minimum alterations.
- 5. The installation of this system does not, in any way, disturb existing mixing facilities.

Built in four sizes, 25 tons to 100 tons per hour.

#### SACKETT Super-Flo... A CONTINUOUS SUPERPHOSPHATE MANUFACTURING PROCESS



shown above is nerve center of Super-Flo Process, Plant is oper-ated from this point by one man.

This new Sackett-conceived and developed process produces a superphosphate of premium quality in either powdered or granular form. Its complete mechanization and centralized panel control brings to the industry entirely new conceptions of high production speeds, low manufacturing costs and quality product control.

These Sackett patented processes are built in three sizes, 25 tons to 75 tons per hour.

Exclusive suspended acidulation produces highly converted superphosphate of excellent quality.



#### SACKETT CONTINUOUS AMMONIATING SYSTEM

The patented Sackett Continuous Ammoniation System is now being offered in four sizes with capacities ranging from 25 tons per hour to 100 tons per hour. This highly efficient method of ammoniating superphosphates and mixed goods with solutions offers many important advantages and is easily installed in connection with existing basing equipment. Higher ammoniation rates are made possible by its accurate proportioning of solids and solutions and lower reactive temperatures due to its exclusive aerating action which takes place during ammoniation. This system is also built in pressurized design for anhydrous ammonia or solutions having high vapor pressures.

America's Foremost Designers and Builders SUPERPHOSPHATE PLANTS - FERTILIZER MIXING PLANTS - RELATED PRODUCTION EQUIPMENT THE A. J. SACKETT & SONS CO., 1727 S. HIGHLAND AVENUE, BALTIMORE 24, MD. Architects and Manufacturing Engineers to the Fertilizer Industry since 1897



future," but emphasized "our military defenses should be made impregnable and, as in the past, I shall continue to support this endeavor to the hilt."

Again referring to the President, he said "it is an insult to our intelligence to assume that we do not realize that the adoption of the President's program will commit us irrevocably to a socialized state from which there is no retreat."

"If the President is against socialism, the people of this country are entitled to receive from him satisfactory answers to these questions," he added. "Why does he continue to pressurize Congress to adopt socialized medicine? Why is he advocating the Brannan Plan, which inevitably means socialized agriculture? Why is he advocating another extension of socialized housing?

"These three proposals alone would mean socialization of your health, your food and the roof over your head," he asserted.

"There are many doors to the house of socialism. It is very easy to get in but very hard to get out."

## KEY TO PICTURES

1. Mrs. Mildred Gallaher, Gulf Fertilizer
Co., Tampa, Watts Gunn, Chilean Nitrats
Sales Corp., Atlanta, Mr. & Mrs. Fred
Woods and Miss Nancy Woods, Gulf Fertilizer Co., Tampa, J. MacRea Parker, Jr.,
American Cyanamid Co., Lynchburg, 2
Mr. & Mrs. George Petitt, Potash Co. of
American, Washington, 3, Mr. & Mrs. Fred
Techter, Nitrogen Div., Allied Chemical
& Dye Corp., New York, 4. W. Johnson, and J. H. Zwemmer, both of SichiDouglass Corp., New York, 4. W. Johnson, and J. H. Zwemmer, both of SichiDouglass Corp., Mey Horne, SichiBann, American Potash Institute. Washington, Ed Pate, Dixie Guano Co., Laurinburg, George Petitt, Potash Company of
America, Washington, & Mrs. Glenn L
Weaver, Steel Wright, Texas Farm Products Co., both of Nacogdoches, 7, Mr. &
Mrs. Cecil Arledge, Virginia-Carolina
Chemical Corp., Richmond, & Mr. & Mrs.
Of. Coope and Robert Coope, Carlsbad, ali
of Potash Co. of America, S. Mr. & Mrs.
O, V. Wells, Dr. & Mrs. B. T. Shaw, all of
USDA, Washington, Mrs. B. T. Shaw, all of
USDA, Washington, B. Dr. Wentrican, S. Mr.
Mrs. Arthur Crago, American Cyanamid Co., Brewster, 12. Lee O. Karp
Morris Karp & Son, Farmingdale, Roy
Lemarche, and W. E. Scott, both of International Paper Co., New York, 13, Sid
Keel, Chicago, and M. S. Malone, AtJonna, D. Mrs. Mrs. W. A. Webster, Quaker Oats Co., Chicago, Tom Camo
Jr., Southwest Potash Co., New York, 14.
M. S. Wright, Texas Farm Products Co.

## New APFC Board Members

Horace M. Albright, United States Potash Company; W. B. Copeland, Smith-Douglass Company, Inc.; James F. Doetsch, Chilean Nitrate Sales Corporation; Edwin Pate, Dixie Guano Company; G. Dexter Sloan, Superior Fertilizer Company; W. T. Steele, Jr., Southern States Cooperative; Mac C. Taylor, Oregon-Washington Fertilizer Company; W. T. Wright, F. S. Royster Guano Company.

Joseph C. Kracht, Naco Fertilizer Company, was elected to fill the unexpired term (ending June 30, 1954) of K. D. Morrison.

## Members Of APFC Executive Committee

James F. Doetsch, Chairman, Chilean Nitrate Sales Corp.; John V. Collis, Federal Chemical Company; C. B. Robertson, Robertson Chemical Corporation; George W. Gage, Anderson Fertilizer Co., Inc.; W. T. Wright, F. S. Royster Guano Company.

### Ex Officio

George E. Petitt, Potash Company of America: Paul T. Truitt, American Plant Food Council. Inc.

Nacogdoches, R. W. Goldthwaite, Lion Oil Co., El Dorado, 13. Mr. & Mrs. R. M. Salter, USDA, Washington, 18. Mr. & Mrs. Jim Doetsch, Chilean Nivrate Sales Corp. New York, Mr. & Mrs. Geo. Gage, Anderson, Mr. & Mrs. & Mrs.

### NFA

(Continued from page 21)

er, to hold the free world boundaries as they stand today. This power must be matched by intellectual, moral and economic strength.

The second phase begins with an effort to know and understand other peoples, as people,—and to teach them in turn to understand us. We have been trying to do this by bragging about our material achievements, and have built only envy and hatred.

The second phase includes enlightened economic cooperation among nations, so that the people may improve their situations by their own efforts, and not with one nation attempting to support the world. For a time this is essential. But in the long run the others do not want our charity, nor will they respect us for it.

The third phase includes political cooperation to settle disputes peacefully, with machinery set up for multilateral negotiation to back up the normal bilateral negotiation between nations.

The fourth phase involves joint power, at the service of all nations to put down agression by one or several.

The final speaker was Allan B Kline, President American Farm Bureau Federation, on "Our Agriculture and America's Defense."

Mr. Kline proved a penetrating speaker who has analyzed the nation's political condition as it relates to the farmer and to the citizen, regardless of his kind of business. Today, he said, survival of individual liberties in the world depends on what you and I do because no other country is able to create and revive a system of government based on individual liberties. Our objective is to maintain and enhance the individual liberties which we enjoy: our citizens must get busy in the political machinery to do this job,-there is no other way. We must protect our right to earn, he said. Controls are designed to cover inflation, not control it. A strong government pays its bills-it doesn't



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have to control prices, its money is good. Business men want and talk of reducing taxes; they should instead reduce expenditures. We can fact that our industry is still called defend America best by operating on a cash basis, capitalize on our production, protect our money value and management.

Wednesday morning's business session officially concluded 27th and largest annual convention. ing will be held in Miami Beach, Roney Plaza, Nov. 19-21.

## NFA Elections

Louis Ware, International Minerals & Chemical, chairman; E. A. Geoghegan, Southern Cotton Oil, vice-chairman; Directors at Large, three years: J. C. Leppart, Mathieson Chemical; Russell Coleman, NFA president. Newly elected district directors: District 9-James D. Dawson, Jr., Fidelity Chemical; District 10-C. J. Cahill, Rath Packing; Jack B. Snyder, Snyder Chemical. District 11-Henning Walthersdorph, Magnolia Fertilizer.

### NFA Chairman's Address

(Continued from page 29)

separate acidulating plants producing superphosphate, and some additional 800 dry mixing plants dependent on these 200 acidulating plants for their supply of available phosphoric acid in the form of superphosphate. It is unthinkable that all these thousand plants will be scrapped to make way for a few very large integrated plants using one of these new processes. It seems to me that part of our challenge covers research and achievement which will permit such small plants to stay in business. I am not advocating arbitrary blocking of progress or efficiency in manufacture, but I do want to see all avenues explored to the end that the "small business" category of our industry will be protected and maintained. Should it come to pass that our manufacturing technique must be so modified that it is only practicable to prepare our available phosphoric acid needs in large integrated plants, such plants may well be the source of raw material supply for the present drymixing plants.

I would call your attention to the upon to furnish more than 900 separate and distinct grades in spite of all the effort that has been put upon grade reduction. Large integrated plants cannot afford to manufacture a multiplicity of grades. They must confine their output to only a few. Should any of these new processes prove to be successful and economic in this country, it must be realized of course that such radical departures from present practices and products cannot take place over night. There will be a period of design and construction, a period of education to the end that new products are proven and accepted, first by our official agricultural agencies and finally by the farmer himself, with whom the proof of the pudding is the eating thereof. In the meantime we will continue to produce, perhaps ever-dwindling, but for many years at least, large tonnages of superphosphate with which to carry on as the newer products are developed.

The present 1,000 fertilizer factories with their more than 50,000 agents and dealers will continue to furnish a well-established efficient distribution system that will serve our farmers well, and continue to furnish them the grades they need to grow their crops.

I ask your careful consideration of these problems to the end that no effort be spared to protect the economy of our industry as it has grown through the years to its present effective status.

## 4th Oak Ridge Symposium August 25-30

The Oak Ridge National Laboratory and the Oak Ridge Institute of Nuclear Studies, in conjunction with the University of Tennessee Atomic Energy Commission Agricultural Research Program are holding the Fourth annual Summer symposium on "The Role of Atomic Energy in Agricultural Research" August 25-30 at the Center Theatre, Oak Ridge, Tennessee.

## Bemis Supplies Convention Scoreboard

Bemis Bro. Bag Co. has mailed out to its friends two folders relating to the conventions this month. One shows the presidential electoral vote from 1860 through 1948, leaving a space for 1952 to be filled in. The second one is a score-card for keeping track of the election returns, and will be mailed just before the November elections.

In the letter of transmittal they comment that a nation can hardly be said to have passed judgment if only half the people vote . . . "If things go wrong and you didn't vote, whom have you to blame but yourself?" the letter asks.

## Hough Again Wins Advertising Award

Again as in 1950, the Frank G. Hough Co., Libertyville, Illinois, has won the top advertising honor which can come to an industrial advertiser. At the annual convention of the NIAA the famed Putman award was made to Raymond P. Wiggers, Hough advertising manager and to Ray B. Thomas of Ervin B. Abramson Advertising, their advertising agency.

The awards are based on proven results, which must be demonstrated to the judges, who are top management men, especially chosen for the purpose. The Hough company and its agency are the first in the history of the awards to win twice.

### Alabama June Conference

130 fertilizer manufacturers, salesmen, suppliers and personnel from Auburn attended the 1952 Fertilizer Conference held at the Black Belt Substation, Marion Junction, Alabama, June 3-4. After a tour of the station, which occupied the morning, the first half of the first afternoon was devoted to pastures. Trends and outlook for fertilizer. and what farmers should know about them, completed the day.

The second day was devoted to tours of the Lower Coastal Plain Substation and the Monroeville Experiment Field.



## For ammonium sulphate you can count on Koppers!

Koppers offers a good commercial grade of ammonium sulphate the ingredient that is so essential to fertilizer because of its high nitrogen content.

CHARACTERISTICS — Koppers Ammonium Sulphate comes in crystals with low free-acid and moisture content. The nitrogen content is guaranteed to be not less than 20.5%.

SHIPMENT-



From St. Paul, Minn. and Kearny, N. J., Koppers Ammonium Sulphate is shipped in 100 lb. and 200 lb. bags—also in boxcars and trucks. From Granite City, Ill. and Midland, Pa., it is shipped only in boxcars and trucks.

## COAL CHEMICALS

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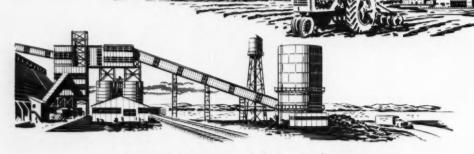
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Soluble plant-nutrient chemicals by Monsanto are being formulated into fertilizer solutions, providing direct feeding to plants of nitrogen, phosphorus and potassium without harm to leaf crops. Immediate solubility, when applied directly to plants, is a characteristic of solutions of Di Ammonium Phosphate, Mono Ammonium Phosphate, Mono Potassium Phosphate and Phosphoric Acid 75%. They also are available for dry applications.

Shipped in appropriate containers, these chemicals are being used by fertilizer manufacturers in processing specific formulations for soil dressing or direct-to-plant applications. Standard farm equipment is used for either spray or solid application. For information concerning this available supply of plant-nutrient chemicals, contact any District Sales Office, or write MONSANTO CHEMICAL COMPANY, Phosphate Division, 1700-C South Second Street. St. Louis 4. Mo.

\* \* \* \*

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MONSANTO PLANT NUTRIENT CHEMICALS								
	N	P20s	K20					
Mono Potassium Phosphate (Crystals)	-0-	51.6%	34.2%					
Di Ammonium Phosphate (Crystals)	21.0%	53.85%	-0-					
Mono Ammonium Phosphate (Crystals)	12.2%	61.61%	-0-					
Phosphoric Acid (75.0%) (Liquid)	-0-	54.5%	-					



SERVING INDUSTRY ... WHICH SERVES MANKING

## ARKANSAS

Temple Cotton Oil. North Little Rock, has sold its fertilizer facilities to Mathieson Chemical, according to a joint announcement by Latane Temple, president, and S. L. Nevins who heads Mathieson's agricultural chemicals department.

The property is near Mathieson's present Little Rock plant, includes a mixing unit, warehouses and loading facilities. Temple's secretary-treasurer, T. E. Cochran has become general manager of the Temple Division.

## CALIFORNIA

Shell Oil has broken ground for the new ammonia plant at Ventura which will produce 150 tons of anhydrous daily. The 29-acre site is laid out for further expansion with minimum interruption to production.

## FLORIDA

Florida Cattlemen's Association, in formal convention assembled, voted down a proposal calling for a cooperative to purchase fertilizer. The spirit of free competitive enterprise should prevail in the fertilizer business, they felt.

Naco has begun actual reconstruction of the Fort Pierce plant which was destroyed by fire last November, almost immediately after it was completed, and expect to be in operation by the end of the year. The plant will cost \$650,000, was designed and equipped by A. J. Sackett & Sons, will have a capacity of 40 tons per hour. Vice-president O. C. Minton says it will have storage capacity for 8,000 tons of bulk and 1000 tons of bagged material; will feature both rail and truck loading facilities.

St. Regis Paper has put into production at Pensacola the new paper machine which can turn out 100,000 tons of kraft annually, and expanded the pulp mill to increase paper and board capacity there to 265,000 annual tons. The new Jacksonville

plant is also going ahead on schedule, and should be in production this Fall with another 100,000 annual tons of kraft, bringing the total St. Regis capacity to 560,000 annual tons.

## GEORGIA

Mofco-Greene Corporation, Greensboro, officially opened its thoroughly mechanized plant early last month, which will mix and custom spread in the area. Hundreds of farmers came to see the new type equipment and were presented with baby chicks. Speakers included Dr. C. C. Murray, dean of the School of Agriculture, U of Ga.; Paul Bowden, Mofco president, James E. Wilson, Jr., vice-president and general manager, and Dick Taylor, manager of the Greensboro plant.

## IOWA

Armour Fertilizer is about to build a plant at Waterloo, making high analysis plant foods formulated for that area. This will bring the Armour plants to a total of 30, according to the announcement from John E. Sanford, president.

### MISSOURI

Koehling-Thompson are building in Marysville a fertilizer plant which will employ 26 men, and is expected to be in operation next month.

## KENTUCKY

Cooperative Fertilizer Service of Richmond, Virginia, whose plans for a plant near Louisville were reported here last month, have struck a snag in the form of 65 militant future neighbors, who don't think they want a fertilizer plant near their homes. Field Representative Zach P. Smith and company attorneys said the plant would be a good neighbor, but the 65 had a spokesman who said he was raised around fertilizer and knows what it smells like.

Grayson Morris, company operations manager, told of the non-smelling technique to be used, and described the beautification program planned. The Zoning Commission reserved judgement until its investigators could sniff around some existing fertilizer plants.

Federal Chemical, Louisville, are planning to build a new plant at Danville, Illinois, which will produce superphosphate and mixed fertilizers. Federal already has six plants.

## MISSISSIPPI

Pittsburgh Coke and Chemical has enlisted the aid of the State's Governor to urge DPA to expedite the approval of the first unit of their new Greenville plant, which is projected eventually as a \$30,000,000 facility.

## NEBRASKA

Allied Chemical & Dye will turn out the first commercial production of pelletized urea fertilizer in the US from their \$25,000,000 new plant at La Platte. More than half the 110,000 annual tons production will be devoted to this form, a 46% analysis, according to Walter S. Colvin, mid-West salesmanager for the Nitrogen Division. (See New York)

Curry Chemical Company's plant at Scottsbluff is the testing ground for a pressure system technique for the production of higher nitrogen content by using the fumes which escape from present equipment. The equipment is the brain child of W. A Curry and Joe Sharp of Spencer Chemical, and in addition to increasing nitrogen recovery is said to eliminate fumes and the need for gas mask wearing within the plant.

### **NEW MEXICO**

International Minerals and Chemical are planning a \$285,000 addition to the plant near Carlsbad, the latest unit in a \$6,000,000 expansion program.

Southwest Potash, Carlsbad, has increased the capacity of the potash plant, which will go into production this Fall as scheduled with a rated capacity of 210,000 annual tons of  $K_2O$ .

## Around the Map

## **NEW YORK**

Naco Fertilizer has moved its head office to 25 Broad Street, New York City. Joseph Kracht has been elected president.

Allied Chemical & Dye Corporation has announced the combination of the Nitrogen and Organic Chemicals Sections of its Solvay Process Division and the Sales Agency Department of its Barrett Division into a new organization to be known as the Nitrogen Division. Allied Chemical & Dye Corporation, with executive offices at 40 Rector Street, New York 6, N. Y.

Hugo Riemer is president of the new Nitrogen Division and M. F. Fogler and F. T. Techter are executive vice presidents. Messrs. Riemer and Fogler were vice-presidents of Solvay and Mr. Techter occupied the same position with Barrett.

The formation of the Nitrogen Division consolidates the production, sales and distribution of many important Allied products into one organization. These products include Nitrogen Solutions, Anhydrous Ammonia, "Arcadian" Nitrate of Soda, "A-N-L" Nitrogen Fertilizer, Urea Products, Methanol, Formaldehyde, Nytron, and other products to be announced at an early date.

Sales of these products will be handled by essentially the same personnel that has handled sales of the same products heretofore:

E. W. Harvey, Director of Sales; J. J. Porter, Assistant Director of Sales; M. E. Hunter, Sales Manager,

Direct Application Materials; R. M. Jones. Director of Product Development; W. H. Mortimer, Sales Manager, Sulphate of Ammonia; G. F. Reale, Sales Manager, Industrial Nitrogen Chemicals; G. W. Suggs, Sales Manager, Fertilizer Manufacture Materials; A. W. Terry, Sales Manager, Export; H. E. West, Sales Manager, Organic Chemicals.

The Nitrogen Division will operate and market the output of the giant Nitrogen plants at Hopewell, Virginia, and South Point, Ohio, the new \$25,000,000 Nitrogen plant to be constructed near Omaha, Nebraska, and the new Organic Chemicals plant to be built at Orange, Texas, for the manufacture of ethylene oxide and ethylene glycol.

The Barrett Division and The Solvay Process Division of Allied Chemical & Dye Corporation will continue to function on other operations and products, formerly handled by these Divisions, which have not been transferred to the new Nitrogen Division.

Alco Grain Corporation are building a \$40,000 plant in Albany to process mash from breweries into chemicals, fertilizer and food.

National Gypsum has broken ground for a \$750,000 addition to its executive offices in Buffalo which is said to be the first downtown office building which incorporates an air-raid shelter in its design. The basement ceiling will be 10-inch concrete capable of supporting the

upper part of the structure should it collapse from enemy attack. The shelter will protect 2,000 people.

## OREGON

Stauffer Chemical's Northwest Division, through the advertising agency of Simon and Smith, Portland, has developed a comic book technique of direct mail advertising of its farm chemicals. Dan Keating. Division manager, and the agency worked it out with the help of company entomologists, R. D. Eichman and Lee Sturgis who rode herd over the technical accuracy of the "balloons." The cost of 6¢ per copy for 100,000 of the books has been amply offset by the response, according to Mr. Keating.

## TENNESSEE

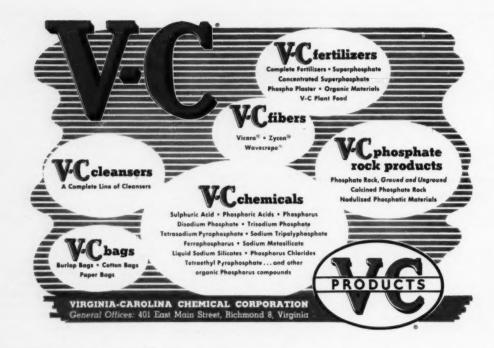
Quaker Oats is planning a \$600,-000 addition to its furfural capacityin Memphis according to Dr. Homer R. Duffey, vice-president in charge of chemicals, which is scheduled for completion during 1953.

## TEXAS

Texas Gulf Sulphur has completed and begun production at its Spindletop Dome. Mined by the Frasch process, it is estimated capable of 300,000 annual tons.

Southwest Fertilizer and Chemical are building a new plant in El Paso, near the Standard Oil refinery from which they buy sulphuric acid. The unit will produce 20,000 annual tons. The company also has a plant at Clint. Robert Kerley is general manager.

J. Ross Boles is building a \$16,000 pulverizing and loading plant next to the sewer plant at San Antonio. He has a contract to work sludge from the drying beds into fertilizer, and expects to develop \$200,000 a year business from it. He has a 10 year contract with a 10 year renewal option, at \$1000 per year.



## VIRGINIA

Smith-Douglass Co., Norfolk, has obtained the right to acquire a majority of shares of Coronet Phosphate. New York, who have a plant and extensive high grade phosphate reserves near Lakeland, Florida. If they proceed with the purchase, an offer will be made to buy the remainder of the shares on the same terms, according to President Ralph B. Douglass.

## WASHINGTON

The Charles H. Lilly Seed Company fertilizer plant in Tacoma was destroyed June 2 by a fire which was estimated at \$425,000.

Whatcom Packers. Inc., Lynden, have incorporated for \$250,000 and are producing a fertilizer called Green Thumb which contains 6% nitrogen and is made from poultry feathers. Officers are Lou Tusing, president; Neil McLeod, vice-president;

dent; Ray Tisdell, treasurer. Directors are Ralph Van Dyk, C. A. Pederson, Claude McClellan, and Delbert Blondheim.

St. Regis Paper's new multiwall bag plant in Tacoma is now in production, replacing the leased plant formerly operated in Seattle.

### AUSTRALIA

Mt. Morgan Mines, Ltd. has agreed to take over operation and technical direction of an \$18,000,000 ammonia sulfate works to be built at Mt. Morgan, Queensland, by outside capital. The plant would produce 100,000 annual tons.

### CANADA

St. Regis Paper has put into production its new multiwall bag plant at Dryden, Ontario, according to vice-president and managing director Thomas H. Cosford of the Canadian corporation.

## CUBA

Elliott Roosevelt has announced plans for a corporation to make fertilizer out of Havana's garbage. The Cuban government has the project under consideration.

### ENGLAND

Marchon Products is planning to build a \$5,800,000 sulphuric acid plant at Whitehaven, which has a 75-year supply of anhydrite. The plant will be operated by Solway Chemicals, will have an initial output of 750,000 annual tons and be ready by 1954.

## HAWAII

Pacific Chemical & Fertilizer Co., on which we had a feature story last month, is going deeper into the insecticide field with a \$75,000 plant for the sulphonation of alkanes to make an emulsifying agent for chemical weed sprays.



## A WHOLE FARM THRIVES ON NOURISHMENT

Horses or pigs . . . oats or corn . . . it's nature's design that makes each living thing on a farm grow every hour of every day. Because growth and nutrition go hand-in-hand, there is an unending demand for the rich plant-food elements in the soil, upon which every growing thing depends. Nature cannot always replace these vital soil ingredients quickly or in great enough quantities. Therefore, fertilizers are used. Many of the most effective fertilizers contain Sunshine State Potash, a product of New Mexico. More than a mere soil nutrient, POTASH strengthens

HIERA GRAMM



HIGRADE MURIATE OF POTASH 62/63%  $\kappa_{\pi^0}$  Granular muriate of Potash 48/53%  $\kappa_{\pi^0}$  manure salts 20%  $\kappa_{\pi^0}$  min.

UNITED STATES POTASH COMPANY, Incorporated, 30 Rockefeller Plaza, New York 20, N. Y. July, 1952

## ISRAEL

Conquest of the desert, an exhibition and fair to be held in April and May of next year in Jerusalem's modern city will dramatize the part played by fertilizer and the development of Israel's mineral wealth. The fair is under the sponsorship of the Israel government and will invite exhibits from all over the world, and present a broad survey of achievements by nations in new ways of land reclamation, irrigation, soil conservation, farm colonization, town planning and research.

The announcement points out that the waters of the Dead Sea are rich in potash and minerals basic to fertilizer, superphosphates, etc.

## INDIA

The Government of India Information Services in a recent bulletin have listed accomplishments, at the top of which is reported the work of Horace Holmes, the county agent from Tennessee, who has taught 102 farming villages the use of simple farm tools, crop rotation, better seeds, cheap but improved farm implements, through which they have raised food production by 46%. As they point out, underproduction, not overproduction, is India's problem.

## JAPAN

Asahi-Dow, Ltd., Kyushu, has been organized by Dow Chemical and The Asahi Chemical Industry Company, large Japanese chemical and textile outfit. Construction will begin at once. President is Tadayoshi Kitemura. Max Kay of Dow is vice-president.

### NAC Meeting Sept. 3-5

Dr. Alfred Weed, John Powell & Co., has been made chairman of the arrangements committee for the 19th annual meeting of the National Agricultural Chemicals Association, which will be held September 3-5 at the Essex & Sussex Hotel, Spring Lake, New Jersey. An interesting and instructive program is promised, and NAC members have always enjoyed the resort where their Fall meeting is traditionally held.

## PREVENTIVE MAINTENANCE APPLIED TO SCALES

By JOHN D. BEESON

Preventive maintenance strives to eliminate breakdowns before they occur.

This aspect of prevention in the field of equipment maintenance has been accented more and more in recent times over the old idea of merely the repair and replacement of worn out parts.

The reason for this shift of emphasis is due to a great many things, such as the scarcity of replacement equipment, the increased cost of this new equipment, and the cost of breakdowns resulting from loss of present high production rates.

It is easily seen that the cost involved due to a minor breakdown could amount to many times the value of the equipment itself, but in most every case the actual failure of a machine either does occur during operation or is discovered at the start of an operation.

The procedure then for preventive maintenance is one of periodically providing care and attention to a machine to keep it functioning, to replace worn parts before failure and while not in use, and to prolong the life of the machine.

All equipment requires maintenance in some amount or another. The amount depends upon the complexity of the machine and the accuracy required of it. Even simple hand tools require cleaning and attention if they are to serve a long and useful life.

Preventive maintenance, however, actually begins at the time of initial installation. It is concerned with providing a proper support, proper assembly technique, and the alignment and adjustment of parts so that the equipment will be functioning within the capacities and conditions for which it was designed.

Once a unit is in operation and working properly, the object of preventive maintenance is to keep it that way; to keep one step ahead of difficulties so that maximum production is attained for the maximum useful life of the machine.

Scales, like all other pieces of mechanical devices, also require maintenance. Here again the amount of maintenance depends upon the complexity and accuracy required.

Weighing devices today occupy a rather unique position in industry Few other devices are as universally used or as universally necessary throughout every industry as are scales in some shape or form.

Actually, scales are a border line case between an instrument and a production tool. They are used in industry not only to determine monetary values of products, but also as a fast, accurate means of quality control in the mixing and processing of a product.

This latter usage in many cases is of as great importance to the producer as the actual portioning out for sale.

Even though scales do play such a vital role, most users, while they may be conscious of maintaining their other equipment, seem to overlook the importance of proper maintenance for their weighing devices. Yet in mose cases all that is needed in the way of preventive maintenance is that it be kept clean and free.

Once a scale unit is installed correctly, with rigid supports and so placed that it receives the commodity without excessive abuse, it will operate properly for many months with only frequent dusting and inspection of the dashpot, if one is used.

As for overhauling or replacment of parts on a scale, this work should be done by personnel familiar with weighing devices and who have had instruction in the art.

Companies who are users of a (Continued from page 52)

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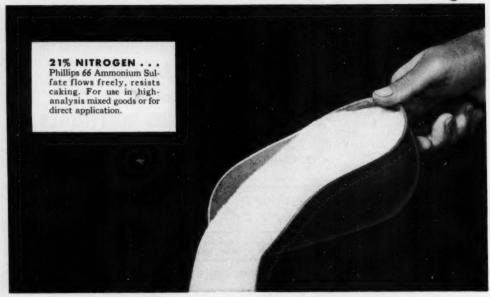
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## It's a Good Mixer!



Nitrogen is in great demand. Even Phillips tremendous capacity isn't equal to today's requirements. But we're making four different kinds of high-quality nitrogen material for mixers and farmers.

1. AMMONIUM NITRATE . . . Phillips 66 Ammonium Nitrate contains 33% N. Small, coated, uniform pellets flow freely and resist caking.

 NITROGEN SOLUTIONS . . . there are three Phillips 66 Nitrogen Solutions for use in the preparation of high-analysis fertilizers and the ammoniation of super-phosphate. These solutions keep handling costs low . promote rapid, thorough curing.

3. ANHYDROUS AMMONIA . . . Phillips 66 Agricultural Ammonia contains 82% N. Convenient, economical source of nitrogen for fertilizers.

4. AMMONIUM SULFATE (see photograph and description above.)

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OMAHA—WOW Bldg. • AMARILLO—First National Bank Bldg. • LOS ANGELES—4521 Produce Plaza West • BARTLESVILLE—Adams Bldg.

## Personals

Lee Ashcraft. Ashcraft-Wilkinson, Atlanta, is rated in his home town as a man who can do anything he sets his mind to. His most recent exploit was getting through a passport for a friend of his grand-daughter, Mary Lee McGinnis, within a few hours of learning of her need, despite 30,000 applications ahead. He told the German Consulate "... but this is for a pretty girl", counting on old-World gallantry. And it worked.

Irving D. Dawes, vice-president and treasurer of Virginia-Carolina Chemical has been appointed to the taxation committee of the National Association of Manufacturers.

Louis Ware, president of International Minerals & Chemical Corp., was given a Doctor of Science degree by the University of Kentucky, where he graduated in 1917.

Mr. & Mrs. A. H. Sterne recently celebrated their golden wedding with a reception in Atlanta's famed Driving Club. Mr. Sterne is vice-president and general manager of sales, Tennessee Corporation.

Louis Wilson, director of information and secretary of American Plant Food Council has been elected one of three life honorary members, for service to agriculture, by American Farm Magazine Editors.

Edward K. Bender, formerly extension horticulturist for the State of Maryland, who has joined American Cyanamid as Agriculturist.







Harold H. Douthit, left, new manager of Area II, composed of Buffalo and Cincinnati sales districts and plants, and Jack K. Lindsey, Cincinnati district manager for the plant food division of International Minerals & Chemical,

John S. Mark who has been with Naco since 1944, has resigned as their technical director to become director of production and procurement for Iowa Plant Food Manufacturing Co., Des Moines.

Dr. James G. Horsfall, Director of the Connecticut AES has been electa fellow of the American Academy of Arts and Sciences. He has held his present post since 1948 and with the Station for nine years prior to that.

. . .

Joseph L. Richardson has been made resident manager of the Hudson Pulp & Paper Corp. mill at Palatka, Florida. He has been with them since 1946. George Balko, whom he replaces, has been assigned to special duty with the Company, working out of the New York office.

Harold E. Clayton who has been made manager of the Davison Chemical plant at Perry. Iowa, succeeding Russell M. Sloman, who has been transferred to the Alliance, Ohio plant.





Alfred J. Dickinson, Jr., with Virginia-Carolina Chemical since 1939 has been elected a vice-president.

Ralph M. Hunter, Dow Chemical, has been nominated as president of the Case Institute almuni, without without opposition.

Harold R. Krueger, who has joined Snyder Chemical Co., Topeka, Kansas. He has been with Phillips and IM&C.



Frederick E. Gross, manager of the paper and paper bag division of Chase Bag Company, recently addressed the senior class of Western Michigan College school of pulp and paper technology on "Paper Bag Manufacture."

Thomas M. Ware and Edward D. McDougal, Jr., have been elected vice-presidents and C. M. Edwards was elected secretary of International Minerals & Chemical.

. . .

Mrs. George W. Leyhe, has retired. She joined the then Barrett Division March 31, 1931 and has been in the Atlanta office of what is now the Nitrogen Division ever since. Her husband is traffic manager of Armour Fertilizer in Atlanta.

. . .

John M. Wallace of Kraft Bag Corporation has had his territory extended to include New Jersey, Pennsylvania, Delaware and Maryland. He will continue to work out of New York headquarters. Edward Burguss, Jr., formerly with Union Bag and Paper will represent Kraft in Illinois, Missouri and part of Iowa, out of St. Louis.

## OBITUARIES

Lawrence R. Carton, retired in 1937 after long service as Eastern manager for Swift & Co. plant food division. In Towson, Maryland.

Joseph M. Coppinger, 60, International Minerals & Chemical, died June 19, after being stricken during the NFA convention. His home was in Evanston, Illinois.

William Harold Hoover, since 1949 president of Anaconda Copper Mining, June 6 at his home in Butte, Montana after a year's illness.

Charles E. LaFrage, for 53 years with International Minerals and Chemical, and Virginia-Carolina; May 31 in Columbus, Georgia after a long illness.

Grace Retz Lodge, wife of Fred S. Lodge, NFA secretary and treasurer; June 7, after a long illness.

Charles G. Satterwhite. 39, mill foreman at Wilson and Toomer, Jacksonville, Florida, May 26, in Durham, North Carolina after an illness of three weeks.

## SCALES

(Continued from page 46)

great many scales have found it advantageous to set up a scale department that has complete charge of the installation and maintenance of all of their weighing equipment. Some companies have found it useful to retain records of each scale, with information as to purchase date, specifications, the date of the last overhaul and the parts that were replaced. From these records it can be determined approximately when it should be returned to the scale shop for checking.

Other companies, who perhaps may have only a few scales in use, rely upon responsible scale repairmen who provide scale service as their business or as a part of their business. These companies have found that having their scales serviced by these men, usually under some sort of contract, has proven to be a great asset against downtime due to scale failures.

In any case, it will be found that the practice of preventive maintenance and repair will prove beneficial in dollars and cents when it is applied to scales as it has for other equipment.

## Hudson Offers Consulting Service

Multiwall sacks sometimes will break after leaving the packer's plant, as a result of faulty storage methods before the sacks were filled. To help prevent this the Hudson Pulp & Paper Corp. is offering the services of its multiwall sack specialists to all multiwall users.

These trained package experts are prepared to make a complete scientific survey of multiwall storage facilities and recommend proper temperature and humidity conditions as well as the most economical methods of effecting changes.

Hudson sacks are manufactured in the country's most modern multiwall mill under scientifically controlled conditions of humidity and are shipped to customers with proper moisture content. Proper maintenance of these conditions will save users the trouble and expense resulting from multiwall breakage—write to Hudson—Dept. PR 505 Park Avenue—New York 22, N. Y. for additional information and free booklet on storage of multiwall sacks.



ALUMINUM TANK 9'-0" Diameter x 30'-0" Long 12,825 Gallons

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We invite your inquiries for high pressure Storage Tanks to handle Ammonia and Nitrogen Solutions, Anhydrous Ammonia — complete with all steel fittings. Also Elevated Water Tanks, Acid or Oil Storage Tanks, Bins, Boilers, Stacks, etc.

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EXACT WEIGHT Sacking Scale installation showing one scale (left) floor mounted, the other scale (right) suspended from ceiling, both on Exact Weight.

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## GEORGIA EDUCATIONAL SOCIETY MEETINGS SLATED JULY 22-23

The Georgia Plant Food Educational Society, formally organized in October last year now has 257 active members and 5 associate members. Two meetings were held last month, one in Atlanta, one in Athens-and two more meetings are being held this month, one July 22 at the auditorium of the State Teachers College, Statesboro, 10:00 a.m. to 1:00 p.m.; the other July 23, same schedule, at the auditorium of the Abraham Baldwin Agricultura! College, Tifton. Lunch will follow both meetings. The program, except that local people will be included in each case, follows the pattern of the two June meetings.

In Atlanta 144 attended, of which 108 were manufacturers, salesmen, dealers, suppliers and extension service personnel. The Athens meeting totalled 94, of which the above group were represented by 71.

The meetings consisted primarily of a panel discussion, following a presentation by Professor W. O. Collins, Head of Agronomy Department, College of Agriculture, University of Georgia. He presented a series of charts showing grades, ratios and recommended usage.



At the Georgia Plant Food Educational Society's Atlanta meeting this big throng gathered. 2. The panel in session: Cooper Morcock; E. D. Alexander; O. A. Dixon; Dr. S. V. Stacey; B. H. Hodges; Dr. L. C. Olson; E. C. Westbrook; Reynolds Clarke; Tom Linder. 3. The officers, including Malcolm Rowe, president; Billy Barton and M. H. Barrett, vice-presidents; Cooper Morcock, secretary; W. E. Morgan, director; E. D. Alexander, Advisor, 4. A group of speakers, prominent educators, narmers and industry representatives. 5. Dr. Paul W. Chapman, Associate Dean, U of Ga.; Tom Linder, Georgia Commissioner of Agriculture.

Tom Linder, Georgia's Commissioner of Agriculture, addressed both meetings, as did Dr. Paul W. Chapman, Associate Dean.

Malcolm Rowe, president, spoke on the activities of the association at both meetings.

The meetings stirred up an active

interest in the region for a substantial reduction of grades recommended and manufactured in Georgia, while up-grading the analysis. This, it is proposed, should be accomplished by a program of education conducted by the College and the industry.



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CORPORATION

## DEL - MAR - VA CONVENTION CONSTRUCTIVE MEET

The George Washington Hotel, Ocean City, Maryland was the scene June 28 of the thirty-first annual convention of the Del-Mar-Va Peninsula Fertilizer Association. Ralph A. Ross, president, after an address of welcome, presented the numerous agronomists and control officials of the Delaware, Maryland and Virginia area.

The first guest speaker was Louis H. Wilson, A.P.F.C., who pointed out the increasing need for fertilizer, due to the growing requirement of the world population for food—"The Fifth Plate"—and the fact that our industry is in a strong and healthy position with estimated production of food exceeding our capacity to supply the needed plant food for it.

W. R. Allstetter, NFA, followed. Highlights of his talk were two points: 1. The banking industry should take note in backing the farmer that his return on fertilizer is the greatest of any investment—about 25 percent. 2. It would pay the fertilizer manufacturer to help the farmer develop an irrigation program—because the more water, the more fertilizer is needed.

Dr. Arthur M. Smith, Mathieson Chemical, gave a statistical talk on acreage in the Del-Mar-Va region. He told of the varying yields per acre in the various portions of the peninsular—and drew from his figures the plant food tonnage used

and required in each portion of the region. His estimates, based entirely on 1949 figures, indicated a need for about twice the fertilizer now being applied.

The final speaker, A. B. Pettit, Davison Chemical, discussed safety. He mentioned the high rate of compensation and casulty insurance in fertilizer plants, and discussed the need for following sane safety programs to cut down the accidents and thus to cut down the rates.

He made the point that it is not necessary for a fertilizer concern to be a member of any association, that all plants are welcome to join in the work and share in the benefits of the Fertilizer Section, National Safety Congress, of which Mr. Pettit is chairman.

On adjournment, a luncheon was served by the hotel, and during the afternoon entertainment was planned for both ladies and gentlemen.

Committees were, for entertainment for ladies: Mrs. T. Scott Purse, Mrs. Wm. B. Tilghman, Jr., John L. Morris. Program: Ralph A. Ross, Edgar H. McGrath, J. Otis McAllister. Entertainment for men committee: Edward H. Smith, Dallas D. Culver, Robert A. Fischer. Registration: F. Nash Strudwick, James R. Ford. Hotel accommodations: Ben T. Truitt, T. Scott Purse.

Following is a list of members of the Association: A. S. Wolley Company, Seaford; Dorchester Fertilizer Co., Cambridge; E. S. Valliant & Son, Inc., Centerville; Farmers and Planters Co., Salisbury; Huston, Culver & Co., Seaford; Milford Fertilizer Co., Milford; Peerless Fertilizer Co., Chestertown; Valliant Fertilizer Co., Laurel; Warner W. Price Co., Smyrna; Wm. B. Tilghman Co., Salisbury-Pocomoke; Worcester Fertilizer Co., Snow Hill.

Officers of the Association in addition to Mr. Ross, are: Edgar H. McGrath, vice-president; J. Otis McAllister, secretary; Robert A. Fischer, treasurer.

## Bin-Dicator Issues New Catalog

George A. Schemm, president, The Bin-Dicator Company, 13946-174 Kercheval, Detroit 15, Michigan, announces that the company has just published a new 1952 catalog describing and illustrating the company's complete line of bin level indicators to show the level of granular and pulverized materials stored in tanks, silos, hoppers and bins. These units also actuate various types of signals, start and stop loading and filling machinery, as required by the level of content in the storage unit. The new catalog supplies complete installation data for the various types of units. The catalog also describes a companion product, the Bin-Flo Aerator Unit, which is used to introduce lowpressure air into dry, finely ground materials which tend to pack and bridge, and thus restore their fluid characteristics.



## **SOUTHERN FERTILIZER & CHEMICAL COMPANY**

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Ammoniated Superphosphate

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Plants: Savannah, Ga., Atlanta, Ga., Charleston, S. C., Roebuck, S. C.



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## Safety

## VIRGINIA

The Fertilizer Section of the Virginia State-wide Safety Conference held its annual meeting at the Thomas Jefferson Hotel in Richmond, Virginia on May 16.

This was the 6th annual meeting of the Fertilizer Section since it was organized in Roanoke, Virginia on May 1947. The Virginia State-wide Safety Conference, which convened on May 15, 16 and 17 in Richmond was the 18th annual conference held since the Virginia State Safety Conference was organized in 1934.

The highlight of the Fertilizer Section meeting was the address of John Smith, Safety Director for the Spencer Chemical Company from Pittsburg, Kansas, vice chairman of the Fertilizer Section of the National Safety Conference. Mr Smith told of the progress of the safety movement in the nation up to the present time. He complimented Bill Richardson, Chairman of the Fertilizer Section of the Virginia State Safety Conference, for the pioneering work he and his cohorts have done in Virginia in spear-heading the drive for safety in the fertilizer industry. Mr. Smith pointed out that the fertilizer industry has one of the worst safety records of any industry in the nation. He made it clear that his own company, the Spencer Chemical Company, and most of the larger companies, who are actually working to promote safety upon a national basis, have excellent safety records themselves. "It is the small dry-mix fertilizer plants, which have no Accident Prevention Programs and who never attend any of our state, national, or regional safety meetings. which have the majority of the industrial accidents in our industry," said Mr. Smith. The speaker further stated. "It is our job to contact and sell safety to the owners, managers, and superintendents of the smaller fertilizer plants, because their poor safety record is what causes the Workmen's Compensation Insurance rate to be so extremely high. The large fertilizer manufacturing plant employing 300 or more men, which has not had a lost-time accident in five years, has to pay exactly the same rate for Workmen's Compensation Insurance as does the small plant employing 25 men, with an average of two lost-time accidents each month." Mr. Smith told of the spade work done in organizing the Fertilizer Section of the National Safety Council and commented upon the enthusiasm demonstrated by the 240 delegates who were present at the Fertilizer Safety Section Meeting in Chicago on last October. He also told the Virginia group about the organization of the Fertilizer Section of the Southern Safety Conference which was organized this year by the officers of the National Fertilizer Section.

Tom Clarke, Personnel Director of G.L.F. Exchange of Ithaca, New York, and the editor of the Fertilizer News Bulletin of the National Safety Council, delivered an unusual and very interesting audience—participation talk based upon poker hands.

E. O. Burroughs, Jr., Insurance Manager for F. S. Royster Guano Company of Norfolk, Virginia, made a talk on good house-keeping, illustrating his talk by using a series of free-hand sketches.

## MARYLAND

Here is a brief resume and a few of the highlights of the Governor's Safety and Health Conference and Exhibit conducted under the auspices of the Maryland State Industrial Commission and the Management of the Maryland Department of Safety.

The Fertilizer Plant Safety Session was held on Thursday afternoon, May 8. This was an informal conference type meeting where the discussion leaders answered specific questions which were then discussed quite freely from the floor. The following list contains a few questions typical of those submitted.

- 1. What is the best plan for training temporary employees in safety, who are hired during the rush season?
- 2. How can employees be persuaded to wear safety equipment?
- 3. What are safe procedures to be followed in the handling of dynamite and working with bulk piles?
- 4. What safety measures can be taken in the operation of car pullers?



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- 5. What is a safe procedure for cleaning conveyor belts?
- 6. What is a safe procedure for dressing drive belts?
- 7. How should a safety program be organized in the fertilizer plants? (particularly small plants)

The above questions were answered by the following panel mem-

Chairman: A. B. Pettit, Supervisor, Industrial Health and Safety, The Davison Chemical Corporation; Moderator: Hugh B. Holt, Safety Director, Mathieson Chemical Corporation; Discussion Leaders: Ralph Fraser, Vice Pres., Summers Fer-tilizer Company; T. M. Bloom, Supt. Superphosphate and Mixed Fertilizer Plants, The Curtis Bay Works, The Davison Chemical Corp.; F. W. High, Manager of Operations, Baugh Chemical Co.; George F. Dietz, Safety Director, Fertilizer Mfg. Coop.

This was the first time since this Congress was inaugurated that a conference type meeting was heldone entirely free from speechmaking and it held the members in their seats to the conclusion of the meet-

There were 53 persons present and out of the questionnaires given out, 32 were returned completely filled out, all of which said they got some good out of the meeting and want another next year. There were also 20 who submitted suggestions for next year's conference.

### FERTILIZER TAX TAG SALES AND REPORTED SHIPMENTS (In Thousands of Equivalent Short Tons) Compiled by The National Fertilizer Association

STATE	May		April		JanApr.		JanFebMar.		July-Apr.	
	1952	1951	1952	1951	1952	1951	1952	1951	1951-52	1950-5
Virginia	-	-	_	-	-	-	322	312	_	
N. Carolina	-	400	454	301	1,347	1,233	893	933	1,664	1,624
S. Carolina	35	32	148	111	691	639	543	528	950	947
Georgia	299	102	297	165	704	887	407	723	956	1,167
Florida	105	112	78	94	494	467	417	374	1,045	995
Alabama	-	-	255	220	771	606	516	386	998	833
Tennessee	138	84	99	92	238	226	140	134	446	346
Arkansas	86	81	75	99	174	234	99	136	238	310
Louisiana	31	25	54	47	194	196	140	149	261	270
Texas	47	48	63	59	302	275	239	215	524	531
Oklahoma	-	-	27	18	89	76	62	57	215	131
TOTAL SOUTH	741	484	1,550	1,206	5,004	4,839	3,778	3,947	7,297	7,154
Indiana	61	50	81	89	432	365	352	275	916	861
Kentucky	46	48	72	55	319	287	247	232	520	495
Missouri	67	74	116	52	388	338	272	285	679	575
TOTAL MIDWEST	174	172	269	196	1,139	990	871	792	2,115	1,931
California	-	-	name:	-	-	-	204	188		-
TOTAL OTHER	page.	1000	_	-	-	-	204	188	-	_
GRAND TOTAL	915	656	1,819	1,402	6,143	5.829	4,853	4,927	9,412	9,085

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## John Powell Buys Elkton Plant

A new insecticide plant at Elkton, Maryland, has been added to the expanding facilities of John Powell & Co., Inc., according to an announcement made by H. Alvin Smith, President. The new insecticide manufacturing plant was purchased outright from the EDCO Corporation, and will be expanded and improved. The new addition will be under the management of James Lyons.

## American Insecticide Aids Jordan Locust War

Aldrin, the deadliest weapon yet developed against man's ancient insect enemy, the locust, is speeding by airplane some 7,500 miles to join other nations and insecticides in a

battle to save a quarter of the world's people from a grave threat of widespread famine.

An emergency shipment of two tons of the powerful insecticide, enough to purge more than 30,000 acres of marauding locusts, has been flown by Shell Chemical from Denver to New York by Flying Tiger, and by several overseas airlines to Damascus, for treatment of locustinfested land in Jordan. The Middle Asian state is one of the most seriously affected of 15 countries of Asia and Africa whose food supply is threatened by what is described as the worst locust infestation in 100 vears.

## UN Sponsors Foreign **DDT Production Centers**

The Pesticide industry is concern-

ed over the recent approval, by the Office of International Trade, of export of materials to equip DDT production centers in Pakistan and Ceylon. It is also proposed by the United Nations that such plants be sent to Egypt and India as well. "NAC News" editorially asks if this be the beginning of a trend toward setting up an entire socialistic chemical industry in foreign nations, reminding its readers that proposals have also been made by the same UN groups that basic chemical equipment also be sent abroadchlorine, sulphuric acid etc. at the expense of the taxpayer. The DDT manufacturers feel such action should not be taken until it has been demonstrated that the American industry is not capable of serving the need.



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FOR SALE: 2 Automatic Scale Bagging Units, 1 Union Special Sewing Machine, head and stand, 1 Newaygo 12" Belt Conveyor, 2 Stedman Type 26 x 20 clod Breakers. The above machinery is in first class condition. Will sell individually or together. Write for prices Box #23, c/o Commercial Fertilizer, 75 Third St., N. W. Atlanta, Ga.

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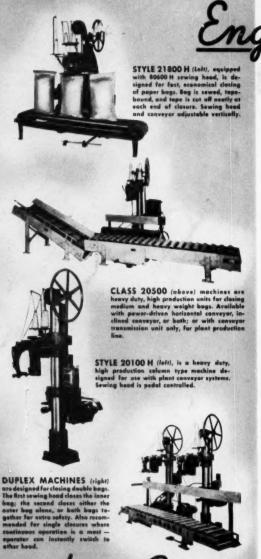
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